



November 6-10, 2006

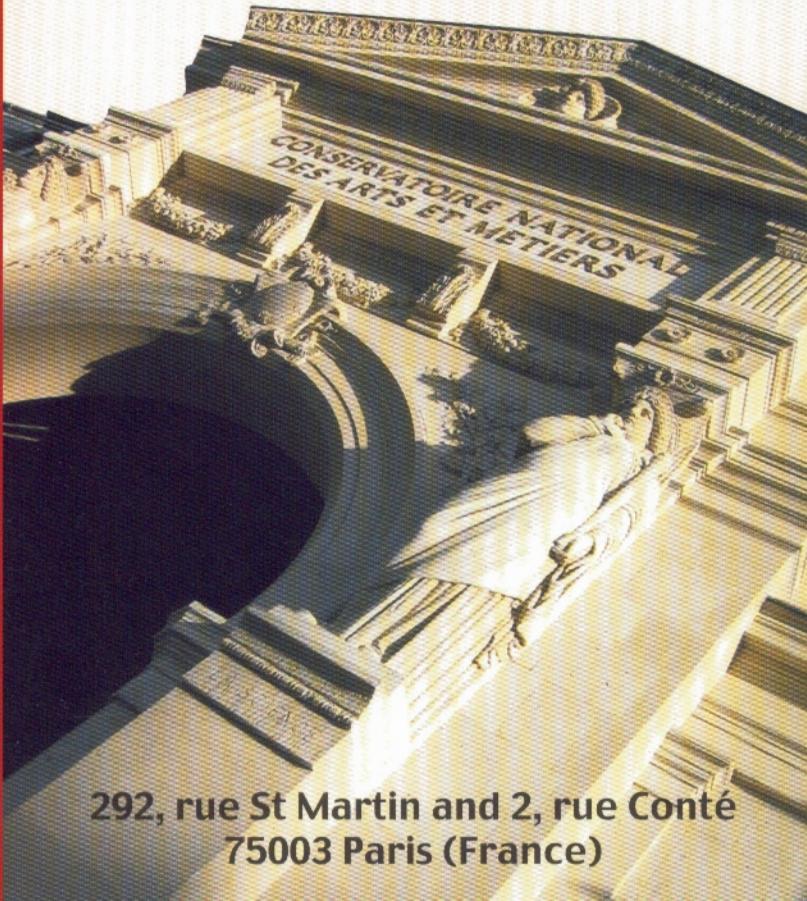
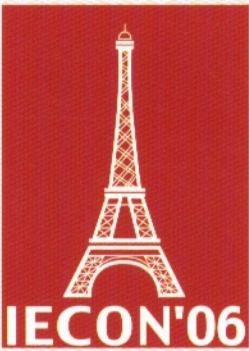
Conservatoire National des Arts et Métiers

The 32<sup>nd</sup> Annual Conference of the IEEE

Industrial Electronics Society

# IEEE - IECON'2006

## Conference Guide



292, rue St Martin and 2, rue Conté  
75003 Paris (France)



**IECON'2006**

**Conference Guide**



## MESSAGE FROM THE GENERAL Co-CHAIRS

It is with great honour and pleasure that we welcome you for the Industrial Electronics Conference (IECON) which is organized in Paris, November 6-10, 2006. For its 32th edition, the flag conference of the IEEE Industrial Electronics Society (IES) is coming in one of the most attractive city in the world since the name Paris is even better known than France itself. Moreover, the conference is hosted by the “Conservatoire National des Arts & Métiers” (CNAM), one of the most prestigious technical institution in the country.

The CNAM has been created on October 10, 1794 on the order of Mgr Grégoire, deputy in the new French Parliament, in order to “enlighten the ignorance and to increase the knowledge and the number of educated people” in applied sciences and technology. It was the first technological institution for higher education created in the country ([www.cnam.fr](http://www.cnam.fr)). Nowadays, the CNAM has more than 85,000 students registered each year and it delivers more than 400 different degrees. It has also a well-known museum dedicated to sciences and technology (<http://www.arts-et-metiers.net/>). Even if the CNAM classrooms are rather old-fashioned, the place is historically classified and it has been chosen for being the most prestigious symbol of higher education in technology in France.

For the 2006 edition, the IECON is technically co-sponsored by the Society of Instrument and Control Engineers of Japan (SICE) and the IEEE France Section. The local organizing committee is composed of members of the IEEE France Section and also of staff from CNAM and University of Picardie “Jules Verne”. Many students from Paris universities and from IEEE student branches have been involved in the organization on a voluntary basis. IECON’2006 has received the support of the French Ministry of Higher Education and Research and from the National Center of Scientific Research (CNRS).

We wish you a very successful conference by having great technical sessions, by meeting new friends and colleagues and by returning back home with new ideas from this exciting technical field of industrial electronics. Enjoy IECON’2006 and make it a memorable event!

Gerard-Andre Capolino  
Leopoldo Garcia-Franquelo  
IECON’2006 general co-chairs

## **MESSAGE FROM THE TECHNICAL PROGRAM Co-CHAIRS**

The Annual Conference of the IEEE Industrial Electronics Society (IECON), is the major event of the worldwide engineering community working in the field of industrial electronics and its applications. It was therefore a great honour and a pleasure for us to be responsible for the technical program of IECON-2006, the 32nd edition of the conference. As we enter the 21st century, the "Conservatoire National des Arts et Métiers" (CNAM) in the centre of Paris is truly a fitting site for the international community to gather and discuss the "art and trade" of the field.

Track chairs and peer reviewers processed nearly 1700 papers coming from 64 countries of the world. Our deepest gratitude is extended to the many volunteers who contributed their valuable time and energy to the review process. The final program exhibits 959 papers and is organized in 131 sessions with oral presentation (including all the special sessions) and 4 poster sessions. It represents the integrated effort of many individuals, namely, authors, reviewers, special session organizers, and the Technical Program Committee, whom we thank for their contributions to the success of IECON 2006.

The technical program is organized in seven tracks: Control Systems & Applications (TPC-1), Electrical Machines & Drives (TPC-2), Power Electronics (TPC-3), Sensors, Actuators and Systems Integration (TPC-4), Signal & Image Processing (TPC-5), Industrial Informatics (TPC-6) and Mechatronics & Robotics (TPC-7).

We are also delighted with the excellent response for special sessions - there are 21 special sessions organized throughout the conference. The world's state of the art in industrial electronics is well represented across the technical tracks and special sessions. If a few words had to be chosen, however, then "multidisciplinary, mixed systems, control, and energy optimisation" are our choices of keywords that summarize the different presentations. We look forward to the intellectual stimulation of all participants, and thank you again for attending IECON-2006. Bienvenue!

Richard Grisel and John Y. Hung  
IECON 2006 technical program co-chairs

# CONFERENCE ORGANIZATION



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## GENERAL INFORMATION

### **Location**

IECN'2006 will be organized in the “Conservatoire des Arts & Métiers” (CNAM) from November 6 to November 10, 2006. CNAM is located both 292, rue St Martin (main entrance) and 2, rue Conté – Paris – District 3. The two buildings are at walking distance.

A general overview of the buildings and the internal distribution of rooms will be found herewith.

#### *Access from Charles de Gaulle Airport*

From any terminal a bus will bring you to the RER Station. Take the RER (special ticket is requested) direction Paris and leave it at the station “Chatelet-Les Halles” (around 1 hour). Then, you can take the Metro line 4 direction “Porte de Clignancourt” and leave it at “Réaumur Sebastopol”. The CNAM is at walking distance.

#### *Access from Orly Airport*

From any terminal (“Sud” and “Ouest”), you can buy a ticket for Orlyval (special ticket at 9.65 Euros). Then, leave the Orlyval at Antony and take the RER direction Paris and leave it at Chatelet Les Halles (around 45 minutes). Then, you can take the Metro line 4 direction “Porte de Clignancourt” and leave it at “Réaumur-Sebastopol”. The CNAM is at walking distance.

#### *Access from the main train stations*

From any train station (Paris-Nord, Paris-Gare de Lyon, Paris-Monparnasse, Paris-Gare de l'Est, Paris-Austerlitz, Paris-Bercy), you have access either to the Metro or to the RER. A map will clearly indicate you the Metro line 4 or the RER line B to reach “Chatelet-Les Halles” and the station “Réaumur-Sebastopol”.

#### *Access by car*

For those coming by car, it is strongly advised to park the car in the surrounding areas (parking are available) and to reach the center of Paris by the public transportation system. It is very difficult to circulate and to park a car within Paris.

## **Registration desk**

The registration desk will be open on:

Sunday November 5, 2006 (292, rue St Martin)

2:30pm-5:30pm

Monday, November 6, 2006 (292, rue St Martin)

8:00am-12:00am

2:00pm-5:30pm

Tuesday, November 7, 2006

8:00am-12:00am (292, rue St Martin)

2:00pm-5:30pm (2, rue Conté)

Wednesday, November 8, 2006 (292, rue St Martin)

8:00am-12:00am

Thursday, November 9, 2006 and Friday, November 10, 2006 (2, rue Conté)

8:00am-12:00am

3:00pm-5:00pm

## **Official language**

The official language of the conference is English for presentations, discussions and conference activities. For the individuals having English as mother language, please do make the effort to be clear enough to be understood by the others.

## **Attendees**

All public building in France have limited access for security reason (Vigipirate). In this way, all the IECON'2006 attendees have to bring with them their ID Card or passport which has to be shown to the security officer every day. They will be controlled at each access to the building from the beginning to the end of the conference.

## **Tutorials**

All the tutorials will be organized on November 6, 2006 from 9:00am to 5:00pm. The access to the tutorials is free for any attendee registered to IECON'2006. However, individual registration is mandatory. A tutorial registration form is available in the website. Any tutorial attendee has to bring his/her own laptop in order to download the tutorial material. No printed documents will be provided.

## **Weather**

The month of November is just in the middle of autumn and in the north part of France, the temperature can oscillate in between 5°C and 15°C. Don't forget your umbrella and your coat in order to be prevented from rain and cold. Please do check to the forecast before travelling to avoid unexpected inconvenience. The conference rooms are in public buildings with an inside temperature of 17°C-19°C.

## **Daily conference breaks**

For the tutorials of Monday November 6, 2006, the coffee break will be organized around the conference rooms between 11:00am and 11:30am.

From Wednesday November 8 to Friday November 10, the morning coffee breaks will be organized close to the conference rooms. One point at each of the following locations (pointed out on the map): access 30.-1, access 31.1, access 33.1, access 37.1 (near the poster session and the exhibition). Some refreshments will be available in the afternoon around 5:00pm near the poster session and the exhibition (access 37.1).

### **Welcome reception**

A welcome reception will be organized on Tuesday November 7, 2006 at “Palais (Maison) de la Mutualité” – 24, rue St Victor – Paris (District 5) – Tel: 01.40.46.12.00 from 7:30pm to 9:30pm. Please don’t miss this informal event you will surely meet new friends and colleagues!

### **Gala dinner**

The gala dinner will be organized on Thursday November 9, 2006 at “Palais (Maison) de la Mutualité” (same location as for the welcome reception) 7:00pm-11:59pm. The award ceremony will be held during the gala dinner. Dressing could be casual.

### **Lunches**

No lunches will be provided with IECON’2006 registration. Moreover, the restaurant of CNAM cannot accept the IECON’2006 participants. Many restaurants will accept IECON’2006 attendees for lunches from Monday November 6 to Friday November 10, 2006. Most of them will have the indication “IECON’2006 Special Menu” visible from outside.

Participants are kindly requested not to rush on “Café Léonard” just in front of the CNAM access 2, rue Conté since the number of places is very limited. Please do move in direction of “Place de la République” (East when you leave CNAM) and to “Beaubourg” (South when you leave CNAM) in order to find more convenient places at walking distances. The lunch time has been extended from 1:00pm to 3:00pm.

### **Tour**

A sightseeing cruise on the river Seine will be organized on Wednesday 8, 2006. The participants have to reach by themselves the location for boat departure from 5:00pm to 5:30pm. The tour operator is “Les Bateaux Parisiens” – Port de la Bourdonnais – Quai Branly – Paris District 7 (a map is joined herewith). The IECON’2006 organizing committee is more than sure than you will enjoy this short overview (almost 1 hour) of Paris. Please don’t be late the boats will not wait for you!

### **Paper presentation**

#### *Oral*

All the authors are kindly requested to meet their co-chairs in the session room 30 minutes before the session schedule in order to download their presentation in one of the co-chair computer. They have to provide the co-chairs with a PowerPoint or PDF presentation bring on a USB key or a CD-ROM (both are strongly recommended). It is not possible to change of computer in between presentations. The length of the presentation is restricted to 20 minutes including questions. The authors are strongly advised to keep their oral presentation within 15 minutes (15 to 20 slides) and to let 5

minutes for questions. They have to bring a short printed bio of 10 lines maximum to the session co-chairs.

#### *Poster*

A poster preparation is a difficult but rather interesting exercise. It is not allowed to simply pin up a simple copy of the published paper. The advised maximum size is A0 European (119cm height, 84cm width). Please do remain in these dimensions or around. A poster display will catch the eye of the viewer (large figures), present a logical sequence of material in an attractive visual way and does not require the reader to examine a detailed text. The authors have to remain at near their poster in order to engage a direct discussion with the conference delegates. This type of presentation allows depth discussion with the audience and provides the opportunity for extended interaction. Each poster will be hanged by the presenters using material provided by conference organizers.

#### *Session chairs*

All the session chairs (special sessions and regular) have to bring their own laptop with them. The packages Microsoft Office PowerPoint® 2003 or higher and the Acrobat Reader® 7.0 or higher with European embedded fonts have to be downloaded before coming. They will have the responsibility of downloading the author presentations at least 30 minutes before the beginning of the session. The authors have to provide them with a USB Key or a CD-ROM with their presentation inside and a short bio (max. 10 lines) in order to be introduced.

The session chairs have the responsibility to make the schedule strictly respected. Each presentation plus questions have to be presented within a period of 20 minutes. In case of "no show", the session chair has to wait 20 minutes for the next paper or to close the session if it is the last paper. Each session chair has to fill a form (one by session) for session evaluation and to bring it back to the registration desk.

All the rooms will be equipped with a video projector and a screen. The session chairs will be assisted by one conference organization member in each room from the beginning of the session up to the end.

#### **Internet access**

A free Internet wireless access will be provided to all the IECON'2006 participants. Please do bring with you a laptop with Wi-Fi facilities. An access code will be provided to the attendees at the registration desk. The rooms (33.1.16, 33.1.17, 33.1.18) will be open at the same time compared to the registration desk starting from November 6, 2006 3:00pm to Friday November 10, 2006 5:00pm. The Internet rooms will be closed on Wednesday November 8, 2006 afternoon.

## PROGRAM AT A GLANCE (PART 1)

### IECON 2006 Final session schedule from Room 1 to Room 7

Room Number	Room 1	Room 2	Room3	Room4	Room 5	Room6	Room7	
CNAM Room reference	30.-14	30.-12	30.-1.1	30.-1.3	31.1.71	31.1.01	31.1.03	
Capacity	168	156	78	64	20	20	20	
Monday 6 TUTORIALS	9:00 AM	11:00 AM	TUT09	TUT03	TUT07	TUT01	TUT05	
						TUT08	TUT10	
	11:30 AM	1:30 PM	TUT09	TUT03	TUT07	TUT01	TUT05	
	3:00 PM	5:00 PM	TUT09	TUT04	TUT07	TUT02	TUT08	
Tuesday 7	10:00 AM to 12:30 AM				Opening session : CNAM Amphitheatres - 292 rue Saint Martin			
	3:00 PM	5:00 PM	TPC3-1	TPC3-2	TP C3-3	TPC2-1	SS20-1	TP C4-1
Wednesday 8	7:30 PM	9:30 PM				Welcome Reception, Palais de la Mutualité		
	8:00 AM	10:00 AM	TPC3-4	TPC3-5	TP C3-6	TPC2-2	SS20-2	TP C4-2
	10:00 AM	11:00 AM				Coffee Break - Poster session 1 - TPC1-P TPC4-P TPC7-P - Exhibition - Hall 37 level 1 (Second Floor)		
Thursday 9	11:00 AM	1:00 PM	TPC3-7	TPC3-8	TP C3-9	TPC2-3	SS22	SS07
	3:00 PM	4:00 PM				Poster session 1 - TPC1-P TPC4-P TPC7-P - Exhibition - Hall 37 level 1 (Second Floor)		
Friday 10	5:00 PM	6:45 PM				SIGHTSEEING CRUISE "Les bateaux Parisiens". 3 private boats leaving 17:00 (580 seats) - 17:15 (300 seats) - 17:30 (120 seats) near "La Tour Eiffel" (1 hour metro from CNAM)		
	8:00 AM	10:00 AM	TP C3-10	TPC3-11	TPC3-12	TPC2-4	TP C2-10	TPC2-16
	10:00 AM	11:00 AM				Coffee Break - Poster session 2 - TPC2-P TPC5-P - Exhibition - Hall 37 level 1 (Second Floor)		
	11:00 AM	1:00 PM	TP C3-13	TPC3-14	TPC3-15	TPC2-5	TP C2-11	TPC2-17
	3:00 PM	5:00 PM	TP C3-16	TPC3-17	TPC3-18	TPC2-6	TP C2-12	TPC2-18
	3:00 PM	5:30 PM				Poster session 2 - TPC2-P TPC5-P - Exhibition - Hall 37 level 1 (Second Floor)		
	7:00 PM	12:00 PM				GALA DINNER - Palais de la mutualité		
	8:00 AM	10:00 AM	TPC3-19	TPC3-20	TPC3-21	TPC2-7	TP C2-13	TPC2-2
	10:00 AM	11:00 AM				Coffee Break - Poster session 3 - TPC3-P TPC6-P - Exhibition - Hall 37 level 1 (Second Floor)		
	11:00 AM	1:00 PM	TP C3-22	TPC3-23	TPC3-24	TPC2-8	TP C2-14	TPC2-3
	3:00 PM	5:00 PM	TP C3-25	TPC3-26	TPC3-27	TPC2-9	TP C2-15	TPC2-4
	3:00 PM	5:30 PM				Poster session 4 - TPC3-PB - Exhibition - Hall 37 level 1 (Second Floor)		

## PROGRAM AT A GLANCE (PART 2)

### IECON 2006 Final session schedule From Room 8 to Room 15

Room Number	Room8	Room9	Room10	Room11	Room12	Room13	Room14	Room15
CNAM Room Reference	31.1.05	31.1.07	33.1.09	33.1.10	33.1.11	33.1.13	33.1.14	33.1.15
Capacity	20	20	20	20	20	20	20	20

Monday 6 TUTORIALS	9:00 AM	11:00 AM	TUT11					
	11:30 AM	1:30 PM	TUT11					
	3:00 PM	5:00 PM						

Tuesday 7	10:00 AM to 12:30 AM		Opening session : CNAM Amphitheatres - 292 rue Saint Martin							
	3:00 PM	5:00 PM		TPC1-1	TPC1-7	TPC1-13	TPC5-1	TPC5-7	TPC7-2	TPC7-4
	7:30 PM	9:30 PM		Welcome Reception, Palais de la Mutualité						

Wednesday 8	8:00 AM	10:00 AM	SS00-1	TPC1-2	TPC1-8	TPC1-14	TPC5-2	SS19-1	TPC7-3	SS08-1	
	10:00 AM	11:00 AM		Coffee Break - Poster session 1 - TPC1-P TPC4-P TPC7-P - Exhibition - Hall 37 level 1 (Second Floor)							
	11:00 AM	1:00 PM	SS00-2	TPC1-3	TPC1-9	TPC1-15	TPC5-3	SS19-2	TPC7-4	SS08-2	
	3:00 PM	4:00 PM		Poster session 1 - TPC1-P TPC4-P TPC7-P - Exhibition - Hall 37 level 1 (Second Floor)							
				SIGHTSEEING CRUISE "Les bateaux Parisiens" - 3 private boats leaving 17:00 (580 seats) - 17:15 (300 seats) - 17:30 (120 seats) near "La Tour Eiffel" (1 hour metro from CNAM)							
	6:00 PM	6:45 PM									

Thursday 9	8:00 AM	10:00 AM	SS01-1	TPC1-4	TPC1-10	SS16-1	TPC5-4	SS18-1	TPC7-5	SS11-1	
	10:00 AM	11:00 AM		Coffee Break - Poster session 2 - TPC2-P TPC5-P - Exhibition - Hall 37 level 1 (Second Floor)							
	11:00 AM	1:00 PM	SS01-2	TPC1-5	TPC1-11	SS16-2	TPC5-5	SS18-2	TPC7-6	SS11-2	
	3:00 PM	5:00 PM	SS06	TPC1-6	TPC1-12	TPC6-1	TPC5-6	SS13	TPC7-7	SS05-1	
	3:00 PM	5:30 PM		Poster session 2 - TPC2-P TPC5-P - Exhibition - Hall 37 level 1 (Second Floor)							
	7:00 PM	12:00 PM		GALA DINNER - Palais de la mutualité							

Friday 10	8:00 AM	10:00 AM	SS01-3	SS09-1	SS15-1	TPC1-16	SS17-1	SS04-1	TPC7-8	SS12-1	
	10:00 AM	11:00 AM		Coffee Break - Poster session 3 - TPC3-PA TPC6-P - Exhibition - Hall 37 level 1 (Second Floor)							
	11:00 AM	1:00 PM	SS01-4	SS09-2	SS15-2	TPC1-17	SS17-2	SS04-2	TPC7-9	SS12-2	
	3:00 PM	5:00 PM		SS09-3	SS15-3	TPC1-18	SS10/14		TPC7-10	SS05-2	
	3:00 PM	5:30 PM		Poster session 4 - TPC3-PB - Exhibition - Hall 37 level 1 (Second Floor)							

## TUTORIALS

	09:00am – 11:00am	11:30am–01:30pm
Room 4: 30.-1.1:	<b>TUT01:</b> Automotive Power Electronics and Motor Drives: Applications in Hybrid Electric and Fuel Cell Vehicles <i>by Ali Emadi</i>	<b>TUT01:</b> Automotive Power Electronics and Motor Drives: Applications in Hybrid Electric and Fuel Cell Vehicles <i>by Ali Emadi</i>
Room 2: 30.-1.2	<b>TUT03 :</b> Reforming Undergraduate Education Worldwide in the Electric Energy Systems Field that includes Power Electronics, Electric Drives and Power System <i>by Ned Mohan</i>	<b>TUT03:</b> Reforming Undergraduate Education Worldwide in the Electric Energy Systems Field that includes Power Electronics, Electric Drives and Power System <i>by Ned Mohan</i>
Room 5: 31.1.71	<b>TUT05 :</b> Utilization of VHDL and FPGAs for the control of power inverters <i>by Eric Monmasson and Marcian Cirstea</i>	<b>TUT05 :</b> Utilization of VHDL and FPGAs for the control of power inverters <i>by Eric Monmasson and Marcian Cirstea</i>
Room 3: 30.-1.1	<b>TUT07 :</b> Thermal Analysis of Electric Motors and Generators <i>by David.A. Staton</i>	<b>TUT07:</b> Thermal Analysis of Electric Motors and Generators <i>by David.A. Staton</i>
Room 6: 31.1.01	<b>TUT08 :</b> High-Power Converters: Topologies, Controls and Applications <i>by Josep Pou and Bin Wu</i>	<b>TUT08 :</b> High-Power Converters: Topologies, Controls and Applications <i>by Josep Pou and Bin Wu</i>
Room 1: 30.-1.4	<b>TUT09 :</b> Collaborative Automation and Service Oriented Architectures in the Industry & Intelligent Environments for Industrial Informatics <i>by Armando Walter Colombo and Mihaela Ulieru</i>	<b>TUT09 :</b> Collaborative Automation and Service Oriented Architectures in the Industry & Intelligent Environments for Industrial Informatics <i>by Armando Walter Colombo and Mihaela Ulieru</i>
Room 7: 31.1.03	<b>TUT10 :</b> Network-Based Control Systems and Applications <i>by Mo-Yuen Chow</i>	<b>TUT10 :</b> Network-Based Control Systems and Applications <i>by Mo-Yuen Chow</i>
Room 8: 31.1.05	<b>TUT11 :</b> Automated Intelligent Control design for Power Electronic Systems and Drives <i>by Pericle Zanchetta, Mark Sumner and Francesco Cupertino</i>	<b>TUT11 :</b> Automated Intelligent Control design for Power Electronic Systems and Drives <i>by Pericle Zanchetta, Mark Sumner and Francesco Cupertino</i>

## TUTORIALS

		<b>03:00pm–05:00pm</b>
Room 4: 30.-1.1:		<b>TUT02</b> : Modelling and Simulation of Power Electronics Systems and Electrical Motor Drives Using MATLAB SimPowerSystems by <b>Gilbert Sybille</b> and <b>Hoang Le-Huy</b>
Room 2: 30.-1.2		<b>TUT04</b> : Passivity based control applied to power converters and to electric motors by <b>Carlo Cecati</b> and <b>Marco Liserre</b>
Room 5: 31.1.71		<b>TUT06</b> : Inductively Coupled Power Transfer by <b>Udaya K. Madawala</b>
Room 3: 30.-1.1		<b>TUT07</b> : Thermal Analysis of Electric Motors and Generators by <b>David.A. Staton</b>
Room 6: 31.1.01		<b>TUT08</b> : High-Power Converters: Topologies, Controls and Applications by <b>Josep Pou</b> and <b>Bin Wu</b>
Room 1: 30.-1.4		<b>TUT09</b> : Collaborative Automation and Service Oriented Architectures in the Industry & Intelligent Environments for Industrial Informatics by <b>Armando Walter Colombo</b> and <b>Mihaela Ulieru</b>

<b>8:00am-10:00am</b> Room	<b>Registration</b> <b>Amphi PP lobby</b>	CNAM - 292, rue St Martin
<b>10:00am-10:45am</b> Room	<b>Opening session</b> <b>Amphi PP – Amphi Y – Amphi C</b>	CNAM - 292, rue St Martin
<b>11:15am-12:00am</b> Speaker Title	<b>Keynote lecture 1</b> Christian Aucourt – RTE Paris La Défense (France) <b>Technological Answers to the Development of the French Transmission System Operator - RTE</b>	
Moderator Room / Time	Leopoldo Garcia Franquelo (Spain) <b>Amphi PP</b>	CNAM - 292, rue St Martin
<b>11:15am-12:00am</b> Speaker Title	<b>Keynote lecture 2</b> Jean Maréchal – CNES Toulouse (France) <b>Integrity of Galileo and EGNOS Navigation Satellite Services - from System Architecture to User</b>	
Moderator Room	John Y. Hung (USA) <b>Amphi C</b>	CNAM - 292, rue St Martin

**TUESDAY 7**

<b>TPC3-1</b>	<b>Power electronics devices - 1</b>
Co-Chairs	Jean-Christophe Crebier (France) & Roberto Schupbach (USA)
Room / Time	<b>30.-1.4 – ROOM 1</b> 3:00 PM to 4:40 PM
<b>3:00 PM</b>	<b>PF-000949 : High Resolution DPWM Generator for DC-DC Converter using Pulse Composite Technique</b> Eiji Takegami, Kohji Higuchi, Kazushi Nakano, Satoshi Tomioka, Kazushi Watanabe
<b>3:20 PM</b>	<b>PF-012513 : Design and Fabrication of a High Temperature (250 °C Baseplate), High Power Density Silicon Carbide (SiC) Multichip Power Module (MCPM) Inverter</b> Edgar Cilio, Jared Hornberger, Brice McPherson, Roberto Schupbach, Alexander Lostetter
<b>3:40 PM</b>	<b>PF-010324 : MOS Controlled AC Switches implemented with Full driver power supplies and dead time management circuits</b> Binh Nguyen Dac, Jean-Christophe Crebier
<b>4:00 PM</b>	<b>PF-001198 : A 100kHz-2kW converter for switched reluctance motor used in high speed machining applications</b> Frederic Saint-Eve, Christophe Sauvey, Gabriel Abba
<b>4:20 PM</b>	<b>PF-001351 : On the Heating Characteristic and Magnetic Flux of a Double-Coil Drive Type Induction Heating Cooker</b> Hironobu Yonemori, Miki Kobayashi
<b>4:40 PM</b>	<b>PF-003043 : High frequency inverter design for large-signal characterization of domestic induction heating load</b> Diego Puyal, Carlos Bernal, José Miguel Burdío, Jesús Acero, Ignacio Millán

**TUESDAY 7**

<b>TPC3-2</b>	<b>Control</b>
Co-Chairs	Luc Loron (France) & Asif Sabanovic (Turkey)
Room / Time	<b>30.-1.2 – ROOM 2</b> 3:00 PM to 4:40 PM
<b>3:00 PM</b>	<b>PF-000892 : Application of an Adaptive Nonlinear Control Strategy to AC-DC-PWM Converter Feeding Induction Heating</b> A. Hadri-Hamida, A. Allag, S. M. Mimoune, M. Y. Ayad, M. Becherif, E. Miliani, A. Miraoui, S. Khanniche
<b>3:20 PM</b>	<b>PF-000703 : QFT design for current-mode PWM buck converters operating in continuous and discontinuous conduction modes.</b> Carlos Olalla Martínez, Ramon Leyva Grasa, Abdelali El Aroudi
<b>3:40 PM</b>	<b>PF-009121 : Parameters and States Estimation with Linear Quadratic Regulator Applied to Uninterruptible Power Supplies (UPS)</b> Rabhi Boualaga, Benaissa Amar, Moussi Ammar, Luc Loron
<b>4:00 PM</b>	<b>PF-010049 : A Linear-Quadratic Regulator with Integral Action Applied to PWM DC-DC Converters</b> Carles Jaen, Josep Pou, Rafael Pindado, Vicenç Sala, Jordi Zaragoza
<b>4:20 PM</b>	<b>PF-013692 : A Mixed LQRI / PI based Control for Three-Phase UPQCs</b> Leonardo Landaeta, Cristian Sepulveda, Jose Espinoza, Carlos Baier
<b>4:40 PM</b>	<b>PF-011711 : A New Control Structure for Hybrid Power Filter to Reduce the Inverter Power Rating</b> Lucian Asiminoaei, Wojciech Wiechowski, Frede Blaabjerg, Tomasz Krzeszowiak, Bartosz Kedra

**TUESDAY 7**

<b>TPC3-3</b>	<b>Energy system</b>
Co-Chairs	Juan Negroni (Spain) & Bruno Francois (France)
Room / Time	<b>30.-1.1 – ROOM 3</b> 3:00 PM to 4:40 PM
<b>3:00 PM</b>	<b>PF-000108 : New Structure for Three Phase Four Wires Hybrid Active Filters</b> Manel Lamich, Josep Balcells, Jaume Garcia, David Gonzalez, Javier Gago
<b>3:20 PM</b>	<b>PF-001766 : Modelling the Connection of Alternative Energy Sources to the Three-phase Utility Grid for Circuit Simulation</b> Federico Scapino
<b>3:40 PM</b>	<b>PF-011584 : Realization of Negative Inductance using Direct Reactance Synthesis (DRS) Technique</b> Leonardo Silva, André Ferreira, Antenor Pomilio
<b>4:00 PM</b>	<b>PF-002771 : High Efficiency SVG System using Open-Winding Transformer and Two Space Vector Modulated Inverters</b> Hidekatsu Terakawa, Yuu Katayama, Yousuke Fujii, Yoshitaka Kawabata, Takao Kawabata
<b>4:20 PM</b>	<b>PF-007323 : Sizing Factor Considerations for Grid-Connected PV Systems Based on a Central Inverter Configuration</b> Guillermo Velasco, Francesc Guinjoan, Robert Piqué, Juan José Negroni
<b>4:40 PM</b>	

**TUESDAY 7**

<b>TPC2-1</b>	<b>Switched reluctance machines and drives</b>
Co-Chairs	S.K. Panda (Singapore) and Abelardo Martinez Iturbe (Spain)
Room / Time	<b>30.-1.3 – ROOM 4</b> 3:00 PM to 4:40 PM
<b>3:00 PM</b>	<b>PF-013072 : Implementation of a SOPC Based Switched Reluctance Drive</b> Ming Tsan Lin
<b>3:20 PM</b>	<b>PF-000132 : Analysis of a Reduced Parts Converter for Bipolar Excitation of an 8/6 Switched Reluctance Drive</b> Chris Edrington, Alton Tounsand, Justin Powell, Billy Yancey
<b>3:40 PM</b>	<b>PF-010413 : Pre-Design and Optimization of three phase homopolar SRM With double statoric winding and double massive rotor</b> Christian Belalahy, Ignace Rasoanarivo, François-Michel Sargas
<b>4:00 PM</b>	<b>PF-001953 : Influence of Coil Arrangement and Current Polarity on the Output Torque of a Switched Reluctance Motor</b> Francisco José Pérez, Abelardo Martínez, Javier Esteban Vicuña, Bonifacio Martín, Eduardo Laloya, Tomás Pollán
<b>4:20 PM</b>	<b>PF-000434 : Study on the Rotor Levitation of one High Speed Switched Reluctance Motor</b> Lizhi Sun, Qi Feng
<b>4:40 PM</b>	<b>PF-013005 : Comparison of Two Switched Reluctance Motors with No-Flux Reversal in the Stator</b> Nimal S. Lobo, Seok-Gyu Oh, Ramu Krishnan

**TUESDAY 7**

<b>SS20-1</b>	<b>Fractional differentiation and their applications - 1</b>
Co-Chairs	Alain Le Mehaute (France) & Blas M. Vinagre (Spain)
Room / Time	<b>31.1.71 – ROOM 5</b> 3:00 PM to 4:40 PM
<b>3:00 PM</b>	<b>PF-007234 : Solution of Linear Time Invariant Differential Equations with 'Proper' Primitives</b> Peter W. Kreml
<b>3:20 PM</b>	<b>PF-003565 : Contribution of Non Integer Integro-Differential Operators (NIDO) to the geometrical understanding of Riemann's conjecture</b> Alain Le Mehaute, Abdelaziz El Kaabouchi, Laurent Nivanen
<b>3:40 PM</b>	<b>PF-008672 : Taking into Account of Non-Linearities in the CRONE approach: Application to Vibration Isolation</b> Pascal Serrier, Xavier Moreau, Jocelyn Sabatier, Alain Oustaloup
<b>4:00 PM</b>	<b>PF-010529 : Estimation of High Heat Flux in Supersonic Plasma Flows</b> Stefan Loehle, Jean-Luc Battaglia, Jean-Christophe Batsale, Frederic Boursereau, Dominique Conte, Pierre Jullien, Bruno Van Ootegem, Jacques Couzi, Jean-Pierre Lasserre
<b>4:20 PM</b>	<b>PF-013242 : Description of complex strain-optical coefficient by the Fractional Standard Solid Model</b> Nicole Heymans
<b>4:40 PM</b>	<b>PF-014729 : N-step predictive algorithm based on fractional multimodel for rat muscle</b> Laurent Sommacal, Arnaud Dossat, Pierre Melchior, Julien Petit, Jean-Marie Cabelguen, Alain Oustaloup

**TUESDAY 7**

<b>TPC4-1</b>	<b>Integrated optics and related technologies</b>
Co-Chairs	J. Jesus Garcia (Spain) & Akihisa Ohya (Japan)
Room / Time	<b>31.1.03 – ROOM 7</b> 3:00 PM to 4:40 PM
<b>3:00 PM</b>	<b>PF-003377 : Application of Photonic Bandgap Fiber in Gas Concentration Measurement</b> Joanna Pawlat, Takahiro Matsuo, Tadashi Sugiyama, Toshitsugu Ueda
<b>3:20 PM</b>	<b>PF-008214 : Applications of the Acousto-Optic Effect on Glass Integrated Optic Devices</b> Luiz Poffo, Philippe Benech, Pierre Lemaître-Auger, Romain Siragusa, Khelifa Djerroud
<b>3:40 PM</b>	<b>PF-009628 : Mobile Robot Localization and Mapping by Scan Matching using Laser Reflection Intensity of the SOKUIKI Sensor</b> Yoshitaka Hara, Hirohiko Kawata, Akihisa Ohya, Shin'ichi Yuta
<b>4:00 PM</b>	<b>PF-011185 : E-Spart Analyzer Based On A Stationary-Fringe Ldv</b> Jing Zhang, Praveen Srivama, Ningning Wu, Malay Mazumder
<b>4:20 PM</b>	<b>PF-015091 : New Optoelectronic Sensor Array for Artificial Visual Cortex</b> Yu-ichi Matsui
<b>4:40 PM</b>	<b>PF-015288 : Reliability improvement of obstacle detection in an IR barrier</b> J. Jesus Garcia, Jesus Ureña, Manuel Mazo, Cristina Losada, Alvaro Hernandez, J. Antonio Jimenez, Ana Jimenez, Carlos De Marziani, Fernando Alvarez, Alberto Ochoa

**TUESDAY 7**

<b>TPC1-1</b> Co-Chairs Room / Time	<b>Estimation &amp; system identification - I</b> Pierre Sicard (Canada) <b>31.1.07 – ROOM 9</b>	3:00 PM to 4:40 PM
3:00 PM	<b>PF-006068 : A Coupled Nonlinear Discrete-Time Controller and Observer Designs for Under-actuated Autonomous vehicles with Application to a Quadrotor Aerial Robot</b> Mihammed Guisser, Hicham Medromi, Hassan Ifassiouen, Janah Saadi, Nour-eddine Radhy	
3:20 PM	<b>PF-014478 : Model-Based Fault Detection Using Adaptive Observer</b> Fatiha Nejjari	
3:40 PM	<b>PF-004227 : Autotuning of a DC Servomechanism Using Closed Loop Identification</b> Ruben Garrido Moctezuma, Roger Miranda Colorado	
4:00 PM	<b>PF-004731 : An Identification for Continuous Time Models of the Multi-Mass System Using the LWTLS Method and the CDM based Order Determination</b> Yasutoshi Yoshioka, Tsuyoshi Hanamoto	
4:20 PM	<b>PF-014613 : Diagnosability Analysis Using Quasi-Static Models</b> Fatiha Nejjari, Ramon Perez, Teresa Escobet	
4:40 PM	<b>PF-001405 : An Artificial Neural Network Based Rotor Position Estimation for Sensorless Permanent Magnet Brushless DC Motor Drive</b> Rajesh Kumar, Santhosh Padmanaban	

**TUESDAY 7**

<b>TPC1-7</b> Co-Chairs Room / Time	<b>Nonlinear &amp; optimal control - II</b> Pierre Melchior (France) <b>33.1.09 – ROOM 10</b>	3:00 PM to 4:40 PM
3:00 PM	<b>PF-000488 : Real Time Linear Control implementation Based on Experimentally Validated Small Signal Model of a Three-Phase Three-Level Boost-Type Vienna Rectifier</b> Nesrine Bel Haj Youssef, Kamal Al-Haddad, Hadi Youssef Kanaan	
3:20 PM	<b>PF-011304 : Design of an optimal stationary frame controller for grid connected ac-dc converters</b> Jae-Won George Hwang, Manfred Winkelkemper, Peter W. Lehn	
3:40 PM	<b>PF-000424 : Trajectory-Based Design of Robust Non-Fragile Controllers for Uncertain Linear Systems</b> Hidetoshi Oya, Kojiro Hagino	
4:00 PM	<b>PF-003539 : Fuzzy Based Output Feedback H<sub>∞</sub> Control for Uncertain Nonlinear Systems: An LMI Approach</b> Ahmad Besheer, Hassan Emara, Mohamed Abdel Aziz	
4:20 PM	<b>PF-009644 : Synthesis Of A Third Generation Crane Controller Using Mu-Analysis Tools</b> Mathieu Moze, Jocelyn Sabatier, Alain Oustaloup	
4:40 PM	<b>PF-009849 : Parameterization of Outputs Tracking to Reference Asymptotically and Achievable by Bounded Inputs</b> Hiroshi Okajima, Toru Asai	

**TUESDAY 7**

<b>TPC1-13</b>	<b>Control of energy systems - I</b>
Co-Chairs	Farhat Fnaiech (Tunisia)
Room / Time	<b>33.1.10– ROOM 11</b> 3:00 PM to 4:40 PM
<b>3:00 PM</b>	<b>PF-006793 : Model Reference Adaptive Control Design for a Shunt Active Power Filter System</b> Kuo-Kai Shyu, Ming-Ji Yang, Yen-Mo Chen, Yi-Fei Lin
<b>3:20 PM</b>	<b>PF-009113 : Resonant Plasma Display Panel Driver with Efficient Energy Recovery Function</b> Sangshin Kwak
<b>3:40 PM</b>	<b>PF-001324 : Sliding Mode Control of Single-Phase UPS Inverters Using a Three-Level Hysteresis Switching Function</b> Osman Kukrer, Hasan Komurcugil, Alper Doganalp
<b>4:00 PM</b>	<b>PF-009881 : Experimental fuzzy control improvement with surface response methodology for power electronics</b> Jérôme Faucher, Pascal Maussion
<b>4:20 PM</b>	<b>PF-003700 : Modeling and control of a cascade boost converter with a single switch</b> Jorge Alberto Morales-Saldaña, Roberto Galarza-Quirino, Jesus Leyva-Ramos, Eduardo Enrique Carbajal-Gutierrez, Ma. Guadalupe Ortiz-Lopez
<b>4:40 PM</b>	<b>PF-000299 : Control for Maximal Wind Energy Tracing in Matrix Converter AC Excited Brushless Doubly-Fed Wind Power Generation System</b> Qi Wang

**TUESDAY 7**

<b>TPC5-1</b>	<b>3D image processing</b>
Co-Chairs	Hirofumi Uemura (Japan) & Christophe Simon (France)
Room / Time	<b>33.1.11– ROOM 12</b> 3:00 PM to 4:40 PM
<b>3:00 PM</b>	<b>PF-001708 : Depth Perception from three blurred images</b> Thierry Simon, Christophe Simon
<b>3:20 PM</b>	<b>PF-006394 : Remarks on 3D Human Body Posture Estimation System Using Simple Multi-Camera System</b> Kazuhiko Takahashi, Yusuke Nagasawa, Masafumi Hashimoto
<b>3:40 PM</b>	<b>PF-006742 : Yarn Segmentation Based on Filament Direction in 3-D CT Images for Structure Analysis of Textile Fabric</b> Toshihiro Shinohara, Jun-ya Takayama, Shinji Ohyama, Akira Kobayashi
<b>4:00 PM</b>	<b>PF-007714 : Correction of Omnidirectional Camera Images using Reconfigurable Hardware</b> Alfredo Gardel, Alvaro Hernandez, Roberto Miota, Ignacio Bravo, Raul Mateos
<b>4:20 PM</b>	<b>PF-010561 : Real-Time Stereo Vision Processing System in a FPGA</b> Carlos Cuadrado, Aitzol Zuloaga, Jose Luis Martin, Jesus Lazaro, Jaime Jimenez
<b>4:40 PM</b>	<b>PF-010952 : Stereo Vision Calibration Procedure for 3D Surface Measurements</b> João L. Vilaça, Jaime C. Fonseca, Antonio M. Pinho

**TUESDAY 7**

<b>TPC5-7</b>	<b>Vehicle image processing</b>
Co-Chairs	Gwenaelle Toulminet (France) & Hojong Baik (USA)
Room / Time	<b>33.1.13 – ROOM 13</b> 3:00 PM to 4:40 PM
<b>3:00 PM</b>	<b>PF-001503 : Color Stereoscopic Steps for Road Obstacle Detection</b> Iyadh Cabani, Gwenaëlle Toulminet, Abdelaziz Bensrhair
<b>3:20 PM</b>	<b>PF-001540 : Road Sign Tracking with a Predictive Filter Solution</b> Sergio Lafuente Arroyo, Saturnino Maldonado Bascón, Pedro Gil Jiménez, Hilario Gómez Moreno, Francisco López Ferreras
<b>3:40 PM</b>	<b>PF-007161 : 3D-Visual Detection of Multiple Objects and Environmental Structure in Complex and Dynamic Indoor Environments</b> Marta Marron, Miguel Angel Sotelo, Juan Carlos Garcia, David Fernandez, Ignacio Parra
<b>4:00 PM</b>	<b>PF-007889 : A new fast multi-layer line detection for embedded robotic application</b> Thomas Costis, Vincent Hugel, Patrick Bonnin
<b>4:20 PM</b>	<b>PF-010375 : Bounding Box Accuracy in Pedestrian Detection for Intelligent Transportation Systems</b> David Fernández Llorca, Ignacio Parra Alonso, Miguel Ángel Sotelo Vázquez, Pedro Alfonso Revenga de Toro
<b>4:40 PM</b>	<b>PF-010472 : Self calibration of a road stereo color vision system using a similarity criterion</b> Sebastien Kramm, Abdelaziz Bensrhair, Pierre Miché

**TUESDAY 7**

<b>TPC7-2</b>	<b>Actuators</b>
Co-Chairs	Karel Jezernik (Slovenia) & Kemalettin Erbatur (Turkey)
Room / Time	<b>33.1.14 – ROOM 14</b> 3:00 PM to 4:40 PM
<b>3:00 PM</b>	<b>PF-001153 : Automated Inspection of Electric Transmission Lines: The power supply system</b> Hector Beltran, Vicente Fuster, Lourdes Pérez, Pedro Mayorga
<b>3:20 PM</b>	<b>PF-004051 : Nonlinear Trajectory Control of a High-Speed Linear Axis Driven by Pneumatic Muscle Actuators</b> Harald Aschemann, Eberhard P. Hofer
<b>3:40 PM</b>	<b>PF-006343 : Distributed Hardware-in-the-Loop Simulation for Space Robot on CAN Bus</b> Wei Ran
<b>4:00 PM</b>	<b>PF-007447 : Virtual Friction Display of Hybrid Force Feedback Interface with Actuators Comprising DC Motor and Magnetorheological Brake</b> Jinung An, Dong-Soo Kwon
<b>4:20 PM</b>	<b>PF-007625 : Modeling and control of the vehicle transmission chain using electric actuators</b> Cherif Larouci, Gilles Feld, Jean-Paul Didier
<b>4:40 PM</b>	<b>PF-011614 : Design and Control of an Outdoor Autonomous Quadrotor Powered by a Four Stroke Engine</b> Bruno Bluteau, Renaud Briand, Olivier Patrouix

<b>TPC7-1</b>	<b>Vision</b>
Co-Chairs	Hiroshi Mizoguchi (Japan) & Eric Brassart (France)
Room / Time	<b>33.1.15 – ROOM 15</b> 3:00 PM to 4:40 PM
<b>3:00 PM</b>	<b>PF-001554 : Visual Servoing of Par4 using Leg Observation</b> Tej Dallej, Nicolas Andreff, Philippe Martinet
<b>3:20 PM</b>	<b>PF-002232 : Vision-Based Computed Torque Control for Parallel Robots</b> Flavien Paccot, Nicolas Andreff, Philippe Martinet, Wisama Khalil
<b>3:40 PM</b>	<b>PF-010316 : Improvements of Object Grabbing Method by Using Color Images and Neural Networks Classification</b> Mohamed Trabelsi, Naima Aitoufroukh, Sylvie Lelandais
<b>4:00 PM</b>	<b>PF-012416 : Motion Detection with Networked Cellular Vision System for Surveillance</b> Hiroyuki Kawai, Hisato Kobayashi
<b>4:20 PM</b>	<b>PF-013099 : A Fast Stereo Matching Algorithm using Interpolation for Sewer Inspection Robots</b> Alireza Ahrary, Masumi Ishikawa
<b>4:40 PM</b>	<b>PF-013307 : Calibration of a Panoramic Stereovision Sensor : Analytical vs Interpolation-Based Methods</b> Nicolas Ragot, Jean-Yves Ertaud, Xavier Savatier, Belahcene Mazari

**WEDNESDAY 8****TPC3-4**Co-Chairs  
Room / Time**Power electronics devices - 2**Fran ois Costa (France) & Hans-Gunter Eckel (Germany)  
**30.-1.4 – ROOM 1**

8:00 AM to 10:00 AM

**8:00 AM****PF-000116 : Multiple turn on of IGBTs in Large Inverters**

Mark Bakran, Martin Helsper, Hans-G nter Eckel

**8:20 AM****PF-003656 : DC Voltage Balancing for PWM Cascaded H-Bridge Converter Based STATCOM**

J. A. Barrena, L. Marroyo, M. A. Rodriguez, O. Alonso, J. R. Torrealday

**8:40 AM****PF-005258 : Super-Junction MOSFET and SiC Diode Application for the Efficiency Improvement in a Boost PFC Converter**

Angelo Raciti, Salvatore Musumeci, Filippo Chimento, Maurizio Melito, Giuseppe Sorrentino

**9:00 AM****PF-011673: A New Hybrid Cycloconverter with Smooth Output Voltage Generation Capability and Accurate Control of the Circulating Current**

Christian Klumpner, Tianning Xu, Jon Clare

**9:20 AM****PF-014737 : Gate driving of high power IGBT through a Double Galvanic Insulation Transformer**

St phane Br haut, Fran ois Costa

**9:40 AM****PF-012831 : Design of Class DE Inverter with Band-pass Filter**

Motoki Katayama, Hiroyuki Hase, Hiroo Sekiya, Janming Lu, Takashi Yahagi

**WEDNESDAY 8****TPC3-5**Co-Chairs  
Room / Time**Control of power converters**

Christophe Batard (France) &amp; Ned Mohan (USA)

**30.-1.2 – ROOM 2**

8:00 AM to 10:00 AM

**8:00 AM****PF-000779 : Adaptive nonlinear Control Applied To a three phase shunt active power filter**

A. Allag, M. Y. Hammoudi, S. M. Mimoune, M. Y. Ayad, M. Becherif, E. Miliani, A. Miraoui, M. Feliachi

**8:20 AM****PF-001295 : A Control Strategy for Four-Wire Shunt Active Filters Using Instantaneous Active and Reactive Current Method.**

Aniel Morais, Ivo Barbi

**8:40 AM****PF-002774 : Control of switched capacitor step-down buck converters**

Mummadi Veerachary

**9:00 AM****PF-003449 : Comparison of Reference Current Generation Techniques for Non-active Power Compensation Under Distorted and Unbalanced Conditions**

Rafael Ordo ez, Charif Karimi, Mohamad Oueidat, Daniel Sadarnac

**9:20 AM****PF-003883 : Control of shunt active power filter for railway sub-station**

Christophe Batard, Mohamed Machmoum, Silverio Alvarez, Philippe Ladoux

**9:40 AM****PF-013285 : DC-DC Converters with a Novel Hysteretic PWM Controller**

Terukazu Sato, Takashi Nabeshima, Kimihiro Nishijima, Tadao Nakano

**TPC3-6**  
Co-Chairs  
Room / Time

**Electrical drives (induction machines)**  
Babak Fahimi (USA) & Eric Monmasson (France)  
**30.-1.1 – ROOM 3**                                    8:00 AM to 10:00 AM

- 8:00 AM PF-001244 : Comparison of direct and indirect matrix converters in induction motor drive**  
Matti Jussila, Heikki Tuusa
- 8:20 AM PF-010545 : Multifunctional Six-Phase Motor Drives with Algorithms of Synchronized PWM**  
Valentin Oleschuk, Radu Bojoi, Francesco Profumo, Alberto Tenconi, Alexandar M. Stankovic
- 8:40 AM PF-013978 : Low-Ripple Low-Transition Time, Current Driver For Large Inductive Loads**  
Antonio Caiafa, Juan A. Sabate, Eladio Delgado
- 9:00 AM PF-000659 : A Space Vector Classification Technique for MEMS Electrostatic Six-Phase Induction Micro-motors**  
Davood Yazdani, Alireza Bakhshai, Geza Joos
- 9:20 AM PF-003174 : Direct and indirect control of a Doubly Fed Induction Generator wind turbine including a storage unit**  
Armand Boyette, Philippe Poure, Shahrokh Saadate
- 9:40 AM PF-001597 : Research on AC-DC-AC Converter for Wind Power Doubly-Fed Induction Generator**  
Hongfei Ma

**WEDNESDAY 8**

**TPC2-2**  
Co-Chairs  
Room / Time

**Sensorless PM machines**  
Ralph Kennel (Germany) & T H Liu (Taiwan)  
**30.-1.3 – ROOM 4**                            8:00 AM to 10:00 AM

- 8:00 AM PF-009571 : Sensorless position-control method based on magnetic saliences for a Long-Stator Linear Synchronous-Motor**  
Roberto Leidhold, Peter Mutschler
- 8:20 AM PF-007862 : Torque Ripple Reduction in Sensorless PMSM Drives**  
Antti Piippo, Jorma Luomi
- 8:40 AM PF-008044 : Sensorless Vector Control of PMSM Drives Equipped With Inverter Output Filter**  
Janne Salomaki, Antti Piippo, Marko Hinkkanen, Jorma Luomi
- 9:00 AM PF-003859 : Speed Sensorless Variable Structure Control of PMSM**  
Evgen Urlep, Karel Jezernik
- 9:20 AM PF-000163 : Adaptive Controller Design for a Sensorless IPMSM Position Control System**  
Ji-Liang Shi, Tian-Hua Liu, Yung-Chi Chang
- 9:40 AM PF-011703 : Extended Kalman Filter Based Speed Sensorless PMSM Control with Load Reconstruction**  
Dariusz Janiszewski

**WEDNESDAY 8**

**SS20-2**  
Co-Chairs  
Room / Time

**Fractional differentiation and their applications - 2**  
Jozsef K. Tar (Hungaria) & Peter W. Kreml (Austria)  
**31.1.71 – ROOM 5**                            8:00 AM to 10:00 AM

- 8:00 AM PF-008451 : Identification of diffusive interfaces using a simplified fractional integrator**  
Amel Benchellal, Francois Benoît-Marrand, Laurent Signac, Thierry Poinot, Jean-Claude Trigeassou
- 8:20 AM PF-014338 : Identification of fractional order models for electrical networks**  
Octavian Enacheanu, Delphine Riu, Nicolas Retière, Petre Enciu
- 8:40 AM PF-000264 : Stability Analysis of Fractional Adaptive High-gain Controllers for Linear Systems**  
Samir Ladaci, Jean-Jacques Loiseau, Abdelfatah Charef
- 9:00 AM PF-008893 : Tuning of Fractional PID Controllers by Using QFT**  
Joaquín Cervera, Alfonso Baños, Concepción A. Monje, Blas M. Vinagre
- 9:20 AM PF-009717 : Fractional Robust Control of a Ball-Beam System**  
Jozsef K Tar, Imre J Rudas, Kazuhiro Kosuge
- 9:40 AM PF-015636 : Fractional robust control of lightly damped systems**  
Valérie Pommier-Budinger, Yaman Janat, Patrick Lanusse, Alain Oustaloup

**WEDNESDAY 8**

<b>SS21</b>	<b>Education in engineering and industrial technologies</b>
Co-Chairs	Seta Bogosyan (USA) & Luis Gomes (Portugal)
Room / Time	<b>31.1.01 – ROOM 6</b> 8:00 AM to 10:00 AM
<b>8:00 AM</b>	<b>PF-015822 : MATLAB Web Server and Web-based Control Design Learning</b> Suzana Uran, Darko Hercog, Karel Jezernik
<b>8:20 AM</b>	<b>PF-015954 : Hardware-in-the-loop simulation of PUMA 560 via internet</b> Trivikram Singaraju, Ali Turan, Metin Gokasan, Seta Bogosyan
<b>8:40 AM</b>	<b>PF-013528 : Remote Target Monitoring in Embedded Systems Lab Courses using a Sensor Network</b> Christian Trödhandl, Markus Proske, Wilfried Elmenreich
<b>9:00 AM</b>	<b>PF-015199 : Digital compensator design for DC-DC converters based on FPGA: an educational approach</b> Pablo Zumel, Cristina Fernandez, Antonio Lazaro, Andres Barrado
<b>9:20 AM</b>	<b>PF-013102 : Virtual Electronics Laboratory: A new tool to improve Industrial Electronics Learning</b> Luis Manuel Menéndez, Angel Salaverría, Enrique Mandado, Jacinto G. Dacosta
<b>9:40 AM</b>	<b>PF-015776 : Integration of Microprocessors and FPGAs for the Education in Digital Systems Design</b> Juan J. Rodríguez-Andina, José Fariña

**WEDNESDAY 8**

<b>TPC4-2</b>	<b>Micro-electro-mechanical systems (MEMS)</b>
Co-Chairs	Philippe Basset (France) & Antonio Luque (Spain)
Room / Time	<b>31.1.03 – ROOM 03</b> 8:00 AM to 10:00 AM
<b>8:00 AM</b>	<b>PF-003179 : Design and Fabrication Issues of a Silicon-Based Vibration Powered Electric Energy Generator Using Parallel Plate and In-Plane Mechanism</b> Ayyaz Mahmood Paracha, Philippe Basset, Chin Leng Peter Lim, Frédéric Marty, Patrick Poulichet, Gilles Amendola, Tarik Bourouina
<b>8:20 AM</b>	<b>PF-008087 : Capacitive pressure microsensor fabricated by bulk micromachining and sacrificial layer etching</b> Antonio Luque, Raquel G. Bolea, Montserrat Fernandez-Bolaños, Adrian Ionescu, Jose M. Quero
<b>8:40 AM</b>	<b>PF-008834 : Tracking system for solar power plants</b> Carmen Aracil, Jose Manuel Quero, Luis Castañer, Rafael Osuna, Leopoldo G. Franquelo
<b>9:00 AM</b>	<b>PF-010251 : Remote actuation of independant electrostatic distributed micromechanical systems (DMMS) for a wireless microrobot</b> Philippe Basset, Lionel Buchaillot, Dominique Collard, Andreas Kaiser
<b>9:20 AM</b>	<b>PF-010987 : BAW resonators reliability in the GHz range</b> Brice Ivira, René-Yves Fillit, Philippe Benech, Fabien Ndagijimana, Guy Parat, Pascal Ancey
<b>9:40 AM</b>	<b>PD-012645 : A PDMS Mold with Embedded Sensory Array for Micromolding Processes</b> R. C. Luo, C. F. Lin, C. W. Liu

**WEDNESDAY 8****SS00-1**

Co-Chairs

Room / Time

**Wind farm power integration into electric grid systems - 1**

Jan T. Bialasiewicz (USA) &amp; Juan M. Carrasco (Spain)

**31.1.05 – ROOM 8**

8:00 AM to 10:00 AM

8:00 AM	<b>PF-015806 : Power Electronic Systems for the Grid Integration of Wind Turbines</b> Juan-Manuel Carrasco, Eduardo Galvan, Ramon Portillo, Leopoldo Franquelo, Jan Bialasiewicz
8:20 AM	<b>PF-001805 : Influence of Long High Voltage Cables on Total Harmonic Distortion of Currents in Wind Farms</b> Juriy Plotkin, Detlef Schulz, Rolf Hanitsch
8:40 AM	<b>PF-003972 : The Wind Farm Aggregation Impact on Power Quality</b> Jan T. Bialasiewicz, Eduard Muljadi
9:00 AM	<b>PF-004677 : Power Factor Adjustment and Energy Management in Large Grid-Connected Wind Parks</b> Detlef Schulz, Rolf Hanitsch
9:20 AM	<b>PF-007633 : Modelling and Analysis of Faults in Wind Power</b> Kim Chan-Ki, Choy Young-Do, Lim Seong-Joo, Choo Jin-Boo
9:40 AM	

**WEDNESDAY 8****TPC1-2**

Co-Chairs

Room / Time

**Estimation & system identification - II**

Jocelyn Sabatier (France)

**31.1.07 – ROOM 9**

8:00 AM to 10:00 AM

8:00 AM	<b>PF-006017 : Discrete-Time Observer Design for a Class of Nonlinear Systems Including Newtonian Mechanical models: Application to an Autonomous Four Rotors Helicopter</b> Mihammed Guisser, Hicham Medromi, Hassan Ifassiouen, Janah Saadi, Nour-eddine Radhy
8:20 AM	<b>PF-012882 : Real-Time Line-of-Sight Rate Estimator for Surface-to-Air Missiles with a RF Seeker</b> Won-Sang Ra, Ick-Ho Whang, Jin-Bae Park
8:40 AM	<b>PF-011851 : Interactive Bank of Unscented Kalman Filters for Fault Detection and Isolation in Reaction Wheel Actuators of Satellite Attitude Control System</b> Nicolae Tudoroiu, Ehsan Sobhani-Tehrani, Khashayar Khorasani
9:00 AM	<b>PF-000497 : DSP Based Experimental Validation Technique Applied to the Development of a New Vienna Rectifier Small Signal Model</b> Nesrine Bel Haj Youssef, Kamal Al-Haddad, Hadi Youssef Kanaan
9:20 AM	<b>PF-013609 : Design and Operation of a Phase-Locked Loop with Kalman Estimator-Based Filter for Single-Phase Applications</b> Karel De Brabandere, Tom Loix, Kristof Engelen, Bruno Bolsens, Jeroen Van den keybus, Johan Driesen, Ronnie Belmans
9:40 AM	<b>PF-010839 : The 4th Official IGS Global Data Center and Evaluation for the Vast Storage On KASI GDC System</b> Daekyu Lee, Sungki Cho, Jonguk Park, Taekyung Sung

**WEDNESDAY 8**

<b>TPC1-8</b>	<b>Nonlinear &amp; optimal control - III</b>
Co-Chairs	John Y. Hung (USA)
Room / Time	<b>33.1.09 – ROOM 10</b>
	8:00 AM to 10:00 AM
<b>8:00 AM</b>	<b>PF-000613 : Fuzzy EKF Control for wheeled nonholonomic vehicles</b> Francesco M. Raimondi, Maurizio Melluso
<b>8:20 AM</b>	<b>PF-001865 : Affined-type Neural-Fuzzy Gap Control of Electromagnetic Suspension Systems</b> Shin-Jen Wu, Cheng-Tao Wu
<b>8:40 AM</b>	<b>PF-000785 : Cooperative Multi-agent-based Control Systems with ITP Method</b> Juichi Kosakaya, Tomoya Ito, Naruhito Kodama
<b>9:00 AM</b>	<b>PF-004197 : Application of a LIPCA for the Structural Vibration Suppression of a Flexible Beam with a Tip Mass: Experiments and Simulations</b> Landong Martua, Seok Heo, Nam Seo Goo
<b>9:20 AM</b>	<b>PF-000929 : Robust Fuzzy-Neural-Network Levitation Control Design for Linear Maglev Rail System with Nonnegative Inputs</b> Rong-Jong Wai, Jeng-Dao Lee
<b>9:40 AM</b>	<b>PF-008656 : A Comparison of Iterative Learning Control Algorithms with application to a Linear Motor System</b> Mark Butcher, Alireza Karimi, Roland Longchamp

**WEDNESDAY 8**

<b>TPC1-14</b>	<b>Control of energy systems - II</b>
Co-Chairs	Michael E. Greene (USA)
Room / Time	<b>33.1.10 – ROOM 11</b>
	8:00 AM to 10:00 AM
<b>8:00 AM</b>	<b>PF-002348 : Digital control strategies for switch-mode power supply</b> Xuefang Lin-Shi, Bruno Allard, Dominique Tournier, Jean-Marie RÉtif, Florent Morel
<b>8:20 AM</b>	<b>PF-011681 : Flatness Based Control of a Hybrid System Using a Supercapacitor as an Energy-Storage Device and a fuel cell as the main power source</b> Alireza Payman, Serge Pierfederici, Farid Meibody-Tabar
<b>8:40 AM</b>	<b>PF-008397 : Speed and rotor flux estimation of induction motors via on-line adjusted Extended Kalman Filter</b> Francesco Alonge, Tommaso Cangemi, Filippo D'Ippolito, Giuseppe Giardina
<b>9:00 AM</b>	<b>PF-010405 : Dynamic Model of a Polymer Electrolyte Fuel Cell Power Device</b> Elie Laffly, Marie-Cecile Pera, Daniel Hissel
<b>9:20 AM</b>	<b>PF-002620 : Simulator of Biomass Cogeneration System</b> Yuuya Shirayama, Nobuo Kurihara
<b>9:40 AM</b>	<b>PD-007501 : Masked Symmetric Chaos Shift Keying : Modulation and demodulation of Chua's circuits using PI control estimated from LMI criterion</b> Frederic Launay, Roxana Burghelea, Pierre Combeau, Patrick Coirault

**WEDNESDAY 8****TPC5-2**

Co-Chairs

Room / Time

**Image processing - I**

R. Palaniappan (UK) &amp; A. Ouahabi (France)

**33.1.11– ROOM 12**

8:00 AM to 10:00 AM

- 8:00 AM PF-001848 : Vision Related Brain Activity for Biometric Authentication**  
Ramaswamy Palaniappan
- 8:20 AM PF-002765 : A Model and Verification for Temperature Dependency of the Noise in Large Size CCD Image Sensor**  
Kazuhiro Hoshino, Toshihiro Nishimura
- 8:40 AM PF-002801 : Real-Time Image Distortion Correction using FPGA-based System**  
Álvaro Hernández, Alfredo Gardel, Laura Pérez, Ignacio Bravo, Raúl Mateos, Eduardo Sánchez
- 9:00 AM PF-004022 : Wood Defect Detection using Grayscale Images and an Optimized Feature Set**  
Paulo Cavalin, Luiz Oliveira, Alessandro Koerich, Alceu Britto
- 9:20 AM PF-006238 : Embedded System Study For Real Time Boosting Based Face Detection**  
Khalil Khattab, Johel Miteran, Julien Dubois, Jiri Matas
- 9:40 AM PF-009709 : Hausdorff Distance Map Classification Using SVM**  
Ait Aouit Djedjiga, Ouahabi Abdeldjalil

**WEDNESDAY 8****SS19-1**

Co-Chairs

Room / Time

**Graphical description for modelling and control of power systems – 1**

Alain Bouscayrol (France) &amp; Jean Belanger (Canada)

**33.1.13– ROOM 13**

8:00 AM to 10:00 AM

- 8:00 AM PD-011053 : Inversion-based control of electromechanical systems using causal graphical descriptions**  
P. J. Barre, A. Bouscayrol, P. Delarue, E. Dumetz, F. Giraud, J. P. Hautier, X. Kestelyn, B. Lemaire-Semail, E. Semail
- 8:20 AM PD-002798 : Power Flow Diagrams Using a Bondgraph Library under Simulink**  
G. H. Geitner
- 8:40 AM PD-005061 : Control structure synthesis for electromechanical systems based on the concept of inverse model using Causal Ordering Graph**  
R. Béarée, P.J. Barre, J.P. Hautier
- 9:00 AM PD-014222 : Modeling of Automotive Control Systems Using Power Oriented Graphs**  
R. Morselli, R. Zanasi
- 9:20 AM PD-008311 : Graphical representation of electrical generators using dynamical equivalent circuits**  
N. Patin, E. Monmasson, J.P. Louis
- 9:40 AM PD-009148 : Modeling of Power Electronic Systems Using Signal Flow Graphs**  
M. Veerachary

**WEDNESDAY 8**

**TPC7-3**  
Co-Chairs  
Room / Time

**Sensors**  
Giovanni Franceschini (Italy) & Schoichiro Fujisawa (Japan)  
**33.1.14 – ROOM 14** 8:00 AM to 10:00 AM

- 8:00 AM PF-001457 : Gyroscope System Identification using an Impulse Response RLS Algorithm**  
Eyad Turki, Tarek Tutunji, Mohammad Molhim
- 8:20 AM PF-004545 : Zoom Microscope Based Micropositioning for MEMS Sensor Packaging System**  
Ligu Chen, Lingyu Ma, Lining Sun, Weibin Rong
- 8:40 AM PF-006289 : Basic Study on Magnetic Suspension by Using the Control of Mutual Inductance**  
Takeshi Mizuno, Yusuke Itani, Yuji Ishino, Masaya Takasaki
- 9:00 AM PF-012009 : Visualization and Analysis of "Pseudo-Contact Point" Loci for Determination of a Sensing Parameter**  
Hiromu Onda, Woo-Keun Yoon, Kosei Kitagaki, Takashi Suehiro
- 9:20 AM PF-001031 : Hierarchical Timing Analysis Considering Global False Coupling Interaction**  
Xiaoxiao Liu, Guangsheng Ma, Guanjun Wang, Gang Feng
- 9:40 AM**

**WEDNESDAY 8**

**SS08-1**  
Co-Chairs  
Room / Time

**Network based control systems – 1**  
Josep M. Fuentes (Spain) & Mo-Yuen Chow (USA)  
**33.1.15 – ROOM 15** 8:00 AM to 10:00 AM

- 8:00 AM PF-010553 : Adaptive Multiple Sampling Rate Scheduling of Real-time Networked Supervisory Control System – Part I**  
Zheng Li, Mo-Yuen Chow
- 8:20 AM PF-013846 : Adaptive Multiple Sampling Rate Scheduling of Real-time Networked Supervisory Control System – Part II**  
Zheng Li, Mo-Yuen Chow
- 8:40 AM PF-009415 : Irregular Actuation and Sampling in a Networked Control System over Profibus-DP**  
Vicente Casanova, Julián Salt, Angel Cuenca
- 9:00 AM PF-006831 : Networked estimation using a send-on-delta method**  
Youngsoo Suh, Vinh Hao Nguyen, Youngshick Ro
- 9:20 AM PF-006734 : Algorithms for Minimizing the Effect of Network Delay of Sensor Data in Network-Based AC Motor Drive**  
Tae-Won Chun, Dong-Sik Kim, Jung-Ryol Ahn, Hong-Hee Lee
- 9:40 AM PF-010936 : The Motion Message Estimator in Real-Time Network Control Systems**  
Chen-Chou Hsieh, Pau-Lo Hsu, Bor-Chyun Wang

**WEDNESDAY 8**

**TPC3-7**  
Co-Chairs  
Room / Time

**Electrical drives - 2**  
Johan Driesen (Belgium) & Hubert Razik (France)  
**30.-1.4– ROOM 1** 11:00 AM to 1:00 PM

- 11:00 AM PF-005649 : A New Investigation on Space Vector Modulation Technique for Voltage Source Inverter in AC Drive**  
Andrew Trentin, Pericle Zanchetta, Patrick Wheeler
- 11:20 AM PF-011657 : Dynamic UPS Drive Model for Low-Power Applications**  
Tom Loix, Edwin Haesen, Karel De Brabandere, Johan Driesen, Ronnie Belmans
- 11:40 AM PF-007811 : Harmonic Analysis of Parallel Frequency Converters Coupled via a Multi-Primary Three-Phase Transformer**  
Anssi Lipsanen, Juha Pyrhönen, Pertti Silventoinen
- 12:00 AM PF-000965 : Improvements in Power Line Communication Reliability for Electric Drives by Random PWM Techniques**  
Mauro Zigliotto, Silverio Bolognani, Luca Sgarbossa, Luca Peretti
- 12:20 PM PF-001465 : Output Voltage Distortion Compensation for Matrix Converter Fed Induction Motor Driven System**  
Yang Mei, Lipei Huang
- 12:40 PM PF-013668 : Impact of the Hybrid Multilevel Modulation Strategy on the Semiconductors Power Losses**  
Diorge Zambra, Cassiano Rech, José Pinheiro

**WEDNESDAY 8**

**TPC3-8**  
Co-Chairs  
Room / Time

**Power electronics devices - 3**  
Jean-Christophe Crebier (France) & William Newberry (UK)  
**30.-1.2– ROOM 2** 11:00 AM to 1:00 PM

- 11:00 AM PF-003593 : Input Impedance Characteristics of an Electronic Choke - Influence by Inductor with Different Winding Structure**  
Tadashi Matsumoto, Akihiko Katsuki
- 11:20 AM PF-004561 : Toward Generic Fully Integrated Gate Driver Power Supplies**  
Nicolas Rouger, Jean-Christophe Crébier, Laurent Aubard, Christian Schaeffer
- 11:40 AM PF-007846 : Efficient Modulation Technique for a Four-Leg Fault-Tolerant Neutral-Point-Clamped Inverter**  
Salvador Ceballos, Josep Pou, Jordi Zaragoza, Jose Luis Martín, Eider Robles, Igor Gabiola
- 12:00 AM PF-000569 : Influence of Skin Effect on MOSFET Losses**  
Alan Elbanhawy, William Newberry
- 12:20 PM PF-000389 : Modern high-voltage IGBTs and their turn-off performance**  
Hans-Guenter Eckel, Mark Bakran
- 12:40 PM PF-001929 : Slanted Oxide-Bypassed Superjunction Power MOSFETs**  
Yu Chen, Yung C. Liang, Ganesh S. Samudra

**WEDNESDAY 8**

<b>TPC3-9</b>	<b>Control of power converters - 2</b>
Co-Chairs	Praveen Jain (Canada) & Patrick Wheeler (UK)
Room / Time	<b>30.-1.1– ROOM 3</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-009334 : Multilevel Phase-Shifting Carrier PWM Technique in Case of Non-equal DC-Link Voltages</b> Marco Liserre, Vito G. Monopoli, Antonio Dell'Aquila, Alberto Pigazo, Víctor M. Moreno
<b>11:20 AM</b>	<b>PF-010685 : Direct Power Control Based Matrix Converter and Its Operation Characteristics</b> Toshihiko Noguchi, Somei Nakatomi, Daisuke Takeuchi
<b>11:40 AM</b>	<b>PF-011215 : A Control Analysis and Implementation of High Voltage, High Frequency Direct Power Converter</b> Huy Quoc Si Dang, Pat Wheeler, Jon Clare
<b>12:00 AM</b>	<b>PF-013056 : A New Cycle by Cycle Controller for a Three Level Resonant Single Stage Power Factor Correction Converter</b> Mohammed Agamy, Praveen Jain
<b>12:20 PM</b>	<b>PF-010693 : Ac Indirect Line Conditioner Digital Control Using PLL Based on the Three-Phase Instantaneous Power Theory</b> Carlos Eduardo Marcussi Gomes, Clovis Antonio Petry, Samir Ahmad Mussa, Hari Bruno Mohr
<b>12:40 PM</b>	<b>PF-004529 : Dynamic Analysis and Control Design of the Asymmetrical Clamped-Mode DC-DC Series Resonant Converter</b> Jorge Luis Sosa Avendaño, Miguel Castilla, Luis Garcia de Vicuña, José Matas, Jaume Miret

**WEDNESDAY 8**

<b>TPC2-3</b>	<b>Sensorless motor drives</b>
Co-Chairs	Ashwin M. Khambadkone (Singapore) & Ramon Blasco (Spain)
Room / Time	<b>30.-1.3– ROOM 4</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-005576 : Impact of Rotor Design on Sensorless Position Estimation</b> Alan S. Budden, Rafal Wrobel, Derrick Holliday, Phil H. Mellor, Andrei Dinu, Parminder Sangha
<b>11:20 AM</b>	<b>PF-008176 : Effectiveness of Induction Motor Model Order for Machine Parameters Estimation in Sensorless Control Drive</b> Sanjay Bodkhe, Mohan Aware
<b>11:40 AM</b>	<b>PF-001643 : Sensorless Vector Control of Spindle Induction Motors Using Rotor Flux Observer with a Variable Bandwidth</b> Jae-Sung Yu, Byoung-Kuk Lee, Chung-Yuen Won
<b>12:00 AM</b>	<b>PF-011096 : Low-Cost Sensorless Induction Motor Speed Control</b> Helder Tavares Câmara, Rafael Cardoso, Hilton Abílio Gründling
<b>12:20 PM</b>	<b>PF-000974 : Position Estimation &amp; Correction Techniques Comparison Between Variance Adjustment in alpha-beta coordinate and Angle Calibration in d-q coordinate for Sensorless Control PMSM based on Space State-estimation</b> Ming-Chuan Huang, Anthony Moses, Fatih Anayi, Xiao-Guang Yao
<b>12:40 PM</b>	

**WEDNESDAY 8**

<b>SS02</b>	<b>Artificial neural networks applied to active power filters</b>
Co-Chairs	Patrice Wira (France) & Djaffar Ould Abdeslam (France)
Room / Time	<b>31.1.71 – ROOM 5</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-010928 : Compensation Current of Active Power Filter Generated by Artificial Neural Network Approach</b> Claudionor Nascimento, Azauri Oliveira Jr., Alessandro Goedtel, Ivan Silva
<b>11:20 AM</b>	<b>PF-003255 : A New Adaline Approach for Online Voltage Components Extraction from Unbalanced and Perturbed Power Systems</b> Djaffar Ould Abdeslam, Patrice Wira, Jean Mercklé, Damien Flieller
<b>11:40 AM</b>	<b>PF-013897 : Synchronous Reference Frame Based Active Filter Current Reference Generation Using Neural Networks</b> Joy Mazumdar, Ronald Harley, Ganesh Venayagamoorthy
<b>12:00 AM</b>	<b>PF-005339 : Artificial Neural Network Based Implementation of Space Vector Modulation for Voltage Fed Inverter Induction Motor Drive</b> Nasser Sadati
<b>12:20 PM</b>	<b>PF-005797 : Simulation of Superconductive Fault Current Limiter (SFCL) Using Modular Neural Network</b> Behrooz Makki, Nasser Sadati, Mohammad Sohani
<b>12:40 PM</b>	

**WEDNESDAY 8**

<b>SS22</b>	<b>Human factors in production</b>
Co-Chairs	Shuji Hashimoto (Japan) & Seiji Hata (Japan)
Room / Time	<b>31.1.01 – ROOM 6</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-015717 : Human Factors of Visual Inspection Systems in Production</b> Seiji Hata
<b>11:20 AM</b>	<b>PF-006777 : Automatic Recognition of Defect Signatures and Identification of Tool Malfunctions</b> Tetsuro Toyoshima, Eiji Yamada, Toshio Yamamoto, Katsuki Imai
<b>11:40 AM</b>	<b>PF-013455 : X-Ray Computed Tomography for Metals Using Fourier Reconstruction</b> Chawanakorn Mantala, Nipon Theera-Umpon
<b>12:00 AM</b>	<b>PF-015695 : Data-logging and Monitoring of Production Auto-lines Based on Visual-tracking Tech</b> Zhenbang Gong, Wei Ding, Hairong Zou
<b>12:20 PM</b>	<b>PF-007005 : Realtime Speaker Tracking for Robotic Auditory System</b> Hideyuki Sawada, Atsushi Todo, Toshiya Takechi
<b>12:40 PM</b>	<b>PF-015474 : Facial Media for Non-verbal Communication in Production Processes</b> Takuma Funahashi, Takayuki Fujiwara, Hiroyasu Koshimizu

**WEDNESDAY 8**

<b>SS07</b>	<b>MATLAB/Simulink® applications in electronics</b>
Co-Chairs	Ahmad Ibrahim (Canada) & Aleksander Malinowski (USA)
Room / Time	<b>31.1.03 – ROOM 7</b> 11:00 AM to 1:00 PM
11:00 AM	<b>PF-013625 : Timing Analysis of Automatically Generated Code by MATLAB/Simulink</b> Rômulo Silva de Oliveira, Marcos Vinicius Linhares, Ricardo Bacha Borges
11:20 AM	<b>PF-014583 : Real-Time Simulation of Permanent Magnet Motor Drive on FPGA Chip for High-Bandwidth Controller Tests and Validation</b> Christian Dufour, Simon Abourida, Jean Bélanger, Vincent Lapointe
11:40 AM	<b>PF-009598 : Simulink-DSP Co-Design of a Fuzzy Logic Controller</b> Abderrachid Bakhti, Lahcene Benbaouche
12:00 AM	<b>PF-014168 : Simulink Model for Double Buffering</b> Rajeshwari Sheeparamatti, Basavaprabhu Sheeparamatti, Manjula Bharamagoudar, Nayan Ambali
12:20 PM	<b>PF-002518 : Free Alternatives to MATLAB for Undergraduate Electronics Engineering Curricula</b> Ahmad Ibrahim
12:40 PM	<b>Invited presentation : Real-Time Simulation for Testing Multi-ECU Embedded Systems in Automotive Applications</b> Rémi Clève

**WEDNESDAY 8**

<b>SS00-2</b>	<b>Wind farm power integration into electric grid systems - 2</b>
Co-Chairs	Juan M. Carrasco (Singapore) & Jan T. Bialasiewicz (USA)
Room / Time	<b>31.1.05 – ROOM 8</b> 11:00 AM to 1:00 PM
11:00 AM	<b>PF-012041 : Stability Improvement of Wind Turbine Systems by STATCOM</b> Z Chen, F Blaabjerg, Y Hu
11:20 AM	<b>PF-005215 : STATCOM-controlled HVDC Power Transmission for Large Offshore Wind Farms: Engineering Issues</b> Serhiy Bozhko, Risheng Li, Ramon Blasco-Gimenez, Greg M Asher, Jon C Clare, Liangzhong Yao, Christian Sasse
11:40 AM	<b>PF-006602 : New Scheme to Connect DFIG to Power Grid</b> Nitin N. Joshi, Ned Mohan
12:00 AM	<b>PF-008796 : Fuzzy logic based supervisor of a wind farm including storage system and able to work in islanding mode</b> Arnaud Davigny, Benoit Robyns
12:20 PM	<b>PF-013374 : Development of a new connection scheme for variable-speed wind turbines using squirrel-cage generators</b> Jose Fco. Sanz, Jesus Sallan
12:40 PM	<b>PF-009903 : Improvement of Voltage Stability in Wind Farm Connection to distribution Network Using FACTS Devices</b> Vahid Salehi, Saeed Afsharnia, Salman Kahrobaee

**WEDNESDAY 8**

<b>TPC1-3</b> Co-Chairs Room / Time	<b>Estimation &amp; system identification - III</b> Andrzej Bartoszewicz (Poland) <b>31.1.07 – ROOM 9</b>	11:00 AM to 1:00 PM
11:00 AM	<b>PF-001829 : Experimental Identification of Natural Gas Cooling Process</b> Toni Bjazic, Petar Crnosija, Fetah Kolonic	
11:20 AM	<b>PF-002008 : Wavenet Based Modeling of Vehicle Suspension System</b> Yul Yunazwin Nazaruddin, Yuliati Yuliati	
11:40 AM	<b>PF-005622 : Identification of diffusive interfaces using a simplified fractional integrator. Part II: non linear case</b> François Benoit-Marand, Laurent Signac, Amel Benchellal, Thierry Poinot, Jean-Claude Trigeassou	
12:00 AM	<b>PF-006262 : Identification of human skill and its application to an automatic driving system -- an approach from hybrid dynamical system</b> Shangchang Ma, Tadanao Zanma, Muneaki Ishida	
12:20 PM	<b>PF-006971 : Mixed H2/Hinf Estimation Design of MEMS-Based Micro Inertial Navigation Systems</b> Shyang-Jye Chang	
12:40 PM	<b>PF-007021 : A Pseudo-Output Error Algorithm To Improve Global Convergence</b> Elie Tohme, Régis Ouvrard, Jean-Claude Trigeassou, Antoine Abche	

**WEDNESDAY 8**

<b>TPC1-9</b> Co-Chairs Room / Time	<b>Intelligent control – I</b> Jocelyn Sabatier (France) <b>33.1.09 – ROOM 10</b>	11:00 AM to 1:00 PM
11:00 AM	<b>PF-002542 : Hybrid Fuzzy-PID-based Control of a Twin Rotor MIMO System</b> Akbar Rahideh, M Hasan Shaheed	
11:20 AM	<b>PF-000922 : Simulation Research of Self-adaptation Fuzzy-IMC Algorithm Based on Virtual-axis polishing Machine Tool</b> Han Shuang, Zhao Ji, Liu Zhixin	
11:40 AM	<b>PF-001414 : Obstacle avoidance algorithm based on biological patterns for anthropomorphic robot manipulator</b> Rafal Kapela, Andrzej Rybarczyk	
12:00 AM	<b>PF-011983 : Controllability and output tracking for an ellipsoidal submarine driven by Kirchhoff's laws</b> Thomas Chambrion, Mario Sigalotti	
12:20 PM	<b>PF-003683 : Control Strategy toward Mobile Robot Based on Driven Configuration Matrix</b> He Xu, B.S. Marie, Ran Wie	
12:40 PM		

**WEDNESDAY 8**

<b>TPC1-15</b> Co-Chairs Room / Time	<b>Teleoperation and network based control</b> Mo-Yuen Chow (USA) <b>33.1.10– ROOM 11</b>	11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-010901 : A fast on-line algebraic estimation of a single-link flexible arm applied to GPI control</b> Jonathan Becedas, Juan R. Trapero, Gabriela Mamani, Hebertt Sira-Ramírez, Vicente Feliu	
<b>11:20 AM</b>	<b>PF-001287 : Development of an omni-directional mobile robot with two or more cameras and navigation based on cell map information</b> Toshihiro Yukawa	
<b>11:40 AM</b>	<b>PF-004715 : Stability of Teleoperation Systems by Delay-dependent Neural LMI Techniques</b> Antonio Barreiro, Emma Delgado	
<b>12:00 AM</b>	<b>PF-001236 : A Distributed approach to the Remote Control and Programming Improvement</b> Francesco M. Raimondi, Ludovico S. Ciancimino	
<b>12:20 PM</b>	<b>PF-001513 : Data Routing and Remote Protocol Analysis using the TETHRA System</b> Mihai Fagadar-Cosma, Liviu D. Faniciu, Mihai V. Micea	
<b>12:40 PM</b>	<b>PF-010812 : A Design Method of Communication Disturbance Observer for Time Delay Compensation</b> Kenji Natori, Kouhei Ohnishi	

**WEDNESDAY 8**

<b>TPC5-3</b> Co-Chairs Room / Time	<b>Image processing - II</b> Yvon Voisin (France) & Ku Chin (Taiwan) <b>33.1.11– ROOM 12</b>	11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-000744 : Colour 3D system characterization</b> Alexandra Lathuilière, Franck Marzani, Yvon Voisin	
<b>11:20 AM</b>	<b>PF-002151 : Extrema Detection of Optimal Smoothing Splines with Application to Edge Detection Problem</b> Hiroyuki Fujioka, Hiroyuki Kano	
<b>11:40 AM</b>	<b>PF-003214 : Data Hiding Scheme With Geometric Distortions Correction</b> Xiaoxia Jiang, Siwei Lu	
<b>12:00 AM</b>	<b>PF-003484 : Image Thresholding Computation of Between-Class Variance in a Partial Parallel Structure</b> Ku Chin Lin, Yi-Hong Lin	
<b>12:20 PM</b>	<b>PF-007137 : 1-D Gabor Directional Filtering for Low-Quality Fingerprint Image Enhancement</b> Ching-Han Chen, Kuo-En Chiu	
<b>12:40 PM</b>	<b>PF-007722 : Background estimation for dynamic video scenes</b> Sebastien Harasse, Laurent Bonnaud, Michel Desvignes	

**WEDNESDAY 8**

<b>SS19-2</b>	<b>Graphical description for modelling and control of power systems – 2</b>
Co-Chairs	Pierre Sicard (Canada) & Betty Lemaire-Semail (France)
Room / Time	<b>33.1.13 – ROOM 13</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PD-009229 : PV inverter simulation using Matlab/Simulink graphical environment and PLECS blockset</b> M. Ciobotaru, T. Kerekes, R. Teodorescu, A. Bouscayrol
<b>11:20 AM</b>	<b>PD-014621 : Hardware-in-the-loop simulation of electric vehicle traction systems using Energetic Macroscopic Representation</b> A. Bouscayrol, W. Lhomme, P. Delarue, B. Lemaire-Semail, S. Aksas
<b>11:40 AM</b>	<b>PD-014575 : InfiniBand-Based Real-Time Simulation of HVDC, STATCOM and SVC Devices with Custom-Of-The-Shelf PCs and FPGAs</b> C. Dufour, S. Abourida, J. Bélanger V. Lapointe
<b>12:00 AM</b>	<b>PD-011959 : Maximum control structure of a five-drive paper system using Energetic Macroscopic Representation</b> Y. Djani Wankam, P. Sicard, A. Bouscayrol
<b>12:20 PM</b>	<b>PD-004014 : Hardware-in-the-loop simulation of different wind turbines using Energetic Macroscopic Representation</b> A. Bouscayrol, X. Guillaud, R. Teodorescu, P. Delarue, W. Lhomme
<b>12:40 PM</b>	<b>PD-014087 : Operating Regions Comparison of a UPQC and its Composing Structures</b> C. A. Sepulveda, J. R. Espinoza, L. M. Landaeta, C. R. Baier

**WEDNESDAY 8**

<b>TPC7-4</b>	<b>Neural networks and fuzzy logic - I</b>
Co-Chairs	Pierre Sicard (Canada) & Ricardo Carelli (Argentina)
Room / Time	<b>33.1.14 – ROOM 14</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-000337 : Multilayer Perceptron Adaptive Dynamic Control for Trajectory Tracking of Mobile Robots</b> Marvin K. Bugeja, Simon G. Fabri
<b>11:20 AM</b>	<b>PF-001201 : An Empirical Study for Fitness Function Selection in Fuzzy Logic Controllers for Mobile Robot Navigation</b> Lefteris Doitsidis, Nikolaos Tsourveloudis
<b>11:40 AM</b>	<b>PF-002747 : Autonomous Vehicle Obstacle Avoiding And Goal Position Reaching By Behavioral Cloning</b> Ranka Kulic; Zoran Vukic
<b>12:00 AM</b>	<b>PF-003944 : Intelligent System of Paraconsistent Logic to Control Autonomous Moving Robots</b> Germano Lambert-Torres, Claudio Torres, Luiz Borges da Silva, Jair Abe
<b>12:20 PM</b>	<b>PF-003948 : Implementation of an Oriented Positioning on a Car-Like Mobile Robot by Fuzzy Control</b> Ouadah Noureddine, Ourak Lamine, Boudjema Farès, Hamerlain Mustapha
<b>12:40 PM</b>	<b>PF-005371 : T-S Fuzzy Path Controller Design for the Omnidirectional Mobile Robot</b> Chong-Cheng Shing, Pau-Lo Hsu, Syh-Shiu Yeh

**SS08-2**

Co-Chairs

Room / Time

**Network based control systems - 2**

Mo-Yuen Chow (USA) & Josep M. Fuertes (Spain)

**33.1.15– ROOM 15**

11:00 AM to 1:00 PM

- 11:00 AM PF-002429 : A CAN Application Profile for Control Optimization in Networked Embedded Systems**

Manel Velasco, Pau Martí, Rosa Castañé, Josep Guàrdia, Josep M. Fuertes

- 11:20 AM PF-014273 : CANopen Network for Microcontroller-based Real Time Distributed Control Systems**

Javier Portillo, Elisabet Estevez, Itziar Cabanes, Marga Marcos

- 11:40 AM PF-001775 : Tuning of PID Controllers for Networked Control Systems**

Mikael Pohjola, Lasse Eriksson, Heikki Koivo

- 12:00 AM PF-011002 : eDSPlab: A remote-accesssed instrumentation laboratory for digital signal processors training based on the Internet**

Sergio Gallardo, Federico Barrero, Sergio Toral, Mario Duran

- 12:20 PM PF-000388 : Fault-Tolerant Ethernet-Based Vehicle On-Board Networks**

Ramez M. Daoud, Hassanein H. Amer, Hany M. Elsayed, Yves Sallez

- 12:40 PM PF-014044**

**Simulation of Message Data in a Testbench for the Multifunction Vehicle Bus**

Jaime Jiménez, Iker Hoyos, Carlos Cuadrado, Jon Andreu, Aitzol Zuloaga

**THURSDAY 9**

<b>TPC3-10</b>	<b>Control of power converters - 3</b>
Co-Chairs	Domenico Casadei (Italy) & Hoang Le Huy (Canada)
Room / Time	<b>30.-1.4– ROOM 1</b> 8:00 AM to 10:00 AM
<b>8:00 AM</b>	<b>PF-001732 : Side effects evaluation of switching frequency modulation in power converters</b> Juan Mon, David González, Javier Gago, Josep Balcells, Alfonso Santolaria, Lluís Ferrer
<b>8:20 AM</b>	<b>PF-011908 : Real-Time Simulation of PWM Power Converters in a Doubly-Fed Induction Generator Using Switching-Function-Based Models</b> Hoang Le-Huy, Gilbert Sybille, Richard Gagnon, Van Que Do
<b>8:40 AM</b>	<b>PF-001379 : Multi-dimensional Approach to Multi-phase Space Vector Pulse Width Modulation</b> Mario J. Durán, Emil Levi
<b>9:00 AM</b>	<b>PF-006998 : A Zero-current Switching PWM Flyback Converter with Low Current Stress</b> Y.P.Benny Yeung, Herbert H.C. Iu, K.W.Eric Cheng, Bruno Robert
<b>9:20 PM</b>	<b>PF-009474 : Impact of Periodic Switching Frequency Modulation control to reduce conducted EMI in Power Factor Converters</b> Jean-Charles Le Bunetel, David Gonzalez, Josep Balcells
<b>9:40 PM</b>	<b>PF-009814 : A Space Vector Modulation Strategy for Matrix Converters Minimizing the RMS Value of the Load Current Ripple</b> Domenico Casadei, Giovanni Serra, Angelo Tani, Luca Zarri

**THURSDAY 9**

<b>TPC3-11</b>	<b>Active filter</b>
Co-Chairs	Pericle Zanchetta (Italy) & Mariusz Malinowski (Poland)
Room / Time	<b>30.-1.2– ROOM 2</b> 8:00 AM to 10:00 AM
<b>8:00 AM</b>	<b>PF-004006 : Performance Analysis of Active Filters Used for Harmonic Compensation</b> Diego Iannuzzi, Pietro Tricoli, Enrico Pagano, Salvatore D'Arco
<b>8:20 AM</b>	<b>PF-002783 : Three-phase Four-Wire Shunt Active Filter to Reduce Voltage and Current Distortions on Distribution Systems</b> Robinson Camargo, Humberto Pinheiro
<b>8:40 AM</b>	<b>PF-008125 : A High Performance Harmonic Current Control for Shunt Active Filters Based on Resonant Compensators</b> Pericle Zanchetta, Mark Sumner, Wanchak Lenwari, Mihai Culea
<b>9:00 AM</b>	<b>PF-001678 : Comparison of Integrator-based and Dead-Beat Controllers for Shunt Power Active Filters</b> Amaia López de Heredia, Ion Etxeberria-Otadui, Marius Malinowski, Seddik Bacha, Daniel Roye
<b>9:20 PM</b>	<b>PF-008095 : Mitigation of voltage dips and voltage harmonics within a micro-grid, using a single shunt active filter with energy storage</b> Fabio Carastro, Mark Sumner, Pericle Zanchetta
<b>9:40 PM</b>	<b>PF-015202 : Digital Implementation of a DC Bus Voltage Controller for Four-Wire Active Filters</b> Vasco Soares, Pedro Verdelho

**THURSDAY 9****TPC3-12**

Co-Chairs

Room / Time

**Sliding mode and genetic algorithms**

Andrzej Bartoszewicz (Poland) &amp; Maria Pietrzak-David (France)

**30.-1.1– ROOM 3**

8:00 AM to 10:00 AM

- 8:00 AM **PF-012564 : Pulse Density Modulation Pattern Optimisation using Genetic Algorithms**  
Demian Pimentel, Ahmed Cheriti, Mohamed Benslima, Pierre Sicard
- 8:20 AM **PF-003328 : Output feedback sliding-mode control for the boost inverter**  
Domingo Cortes, Nimrod Vazquez, Jaime Alvarez
- 8:40 AM **PF-011363 : Stacked Multicell Converter: Digital Sliding Mode Observation of Flying Capacitor Voltages**  
Anne-Marie Lienhardt, Guillaume Gateau, Thierry Meynard
- 9:00 AM **PF-000686 : Analysis of the Behaviour of Genetic Algorithm Applied in Optimization of Electrical System Design for Offshore Wind Farms**  
Menghua Zhao, Zhe Chen, Jesper Hjerrild
- 9:20 PM **PF-013986 : Integration of Artificial Neural Networks and Genetic Algorithm to Predict Electrical Energy consumption**  
Ali Azadeh
- 9:40 PM **PF-000208 : Design of Pulsewidth-Modulation Based Sliding Mode Controllers for Power Converters in Discontinuous Conduction Mode**  
Siew-Chong Tan, Yuk Ming Lai, Chi Kong Tse, Luis Martinez-Salamero, Angel Cid-Pastor

**THURSDAY 9****TPC2-4**

Co-Chairs

Room / Time

**Sensorless induction machine drives**

Thomas Wolbank (Austria) &amp; Iulian Birou (Romania)

**30.-1.3– ROOM 4**

8:00 AM to 10:00 AM

- 8:00 AM **PF-001511 : Sensorless Control of Induction Machines, including Zero Frequency using only Fundamental PWM Excitation**  
Q Gao, Greg Asher, Mark Sumner, P Makyš
- 8:20 AM **PF-002046 : Sensorless Vector Control of Induction Motor Sensorless Vector Control of Induction Motor using Singularity Perturbed Sliding Mode Observer**  
Mezouar Abdelkader, Fellah Mohamed Karim, Sahali Yamina, Hadjeri Samir
- 8:40 AM **PF-001481 : A low memory disturbance elimination method for sensorless control of induction motor drive using test vector injection**  
Pavol Makys, Greg Asher, Mark Sumner, Qiang Gao, Jan Vittek
- 9:00 AM **PF-003647 : Speed Sensorless Vector Controlled Induction Machine in Flux Weakening Region**  
Samir Moulaoum, Omar Touhami, Abderrezak Rezzoug, Lotfi Baghli
- 9:20 PM **PF-003052 : A Minimization of Speed Ripple of Sensorless DTC for controlled Induction Motors used in Electric Vehicles**  
Farid Khoucha, Khoudir Marouani, A.Aziz Kheloui, M.E.H Benbouzid
- 9:40 PM **PF-007935 : Experimental Verification for Stability Improvement of Sensor-less Vector Control System of Induction Motor Using Observer Gain Tuning**  
Kazuhiro Ohyama, Greg Asher, Mark Sumner

**THURSDAY 9**

<b>TPC2-10</b> Co-Chairs Room / Time	<b>Electrical machines - III</b> M. A. Rahman (Canada) & B. Kawkabani (Switzerland) <b>31.1.71 – ROOM 5</b>	8:00 AM to 10:00 AM
8:00 AM	<b>PF-000396 : Analytical formulation of the no-load magnetic field in IPM tubular machines with translator eccentricity</b> Fabrizio Marignetti, Piergiacomo Cancelliere, Roberto Di Stefano, Vincenzo Delli Colli, Maurizio Scarano	
8:20 AM	<b>PF-003123 : Modelling and Control of an Ultrasonic Motor: Application to a Mechanical Claw Drive</b> Frédéric Giraud, Betty Lemaire-Semail, Alain Bouscayrol	
8:40 AM	<b>PF-002666 : The Rotor Conductor Design for Starting Stability of Line-Start Synchronous Reluctance Motor</b> Tae-Uk Jung, Cheol-Ho Yun, Hyun-Rok Cha, Hyung-Mo Kim, Hyuk Nam, Jung-pyo Hong	
9:00 AM	<b>PF-008877 : Aspects Concerning the Performances of a New Insulation System for Low Voltage Asynchronous Motors</b> Sonia Degeratu, Bogdan Degeratu, Mihaela Popescu	
9:20 PM	<b>PF-014672 : Design and Analysis of an Interior Permanent Magnet (IPM) Machine with Very Wide Constant Power Operation Range</b> Rukmi Dutta, F. Rahman	
9:40 PM	<b>PF-008737 : A Study on the Electric and Magnetic Circuit of Single Phase Line Start Permanent Magnet Motor</b> Eiko Nakayama, Koichiro Sawa	

**THURSDAY 9**

<b>TPC2-16</b> Co-Chairs Room / Time	<b>Control of PM drives</b> Friedrich W. Fuchs (Germany) & Kiyoshi Ohishi (Japan) <b>31.1.01 – ROOM 6</b>	8:00 AM to 10:00 AM
8:00 AM	<b>PF-001234 : Intelligent Speed Control of Interior Permanent Magnet Motor Drives</b> Casey B. Butt, M.A. Rahman	
8:20 AM	<b>PF-007919 : Back-EMF Detection Technique of Brushless DC Motor Drives for Wide Range Control</b> Yen-Shin Lai, Yong-Kai Lin	
8:40 AM	<b>PF-010006 : Automatic Identification of a PMSM Drive Equipped with an Output LC Filter</b> Piotr Szczupak, Jose M Pacas	
9:00 AM	<b>PF-002631 : Inverter Modeling and Current Control System Design for Improving Current Response of PM Synchrounous Motor in Overmodulation Range</b> Smith Lerdudomsak,.. Mitsuhiro Kadota, Shinji Doki, Shigeru Okuma	
9:20 PM	<b>PF-000505 : Field Weakening with Nonlinear Controller Design for an Interior Permanent Magnet Synchronous Motor</b> Ji-Liang Shi, Tian-Hua Liu, Shih-Hsien Yang	
9:40 PM	<b>PF-011797 : A Novel Digital Control Technique For Brushless DC Motor Drives: Steady State And Dynamics</b> Fernando Rodriguez, Ali Emadi	

**THURSDAY 9**

<b>TPC4-3</b> Co-Chairs Room / Time	<b>Intelligent sensors</b> Danielle Nuzillard (France) & Emmanuel Jacques (France) <b>31.1.03– ROOM 7</b>	8:00 AM to 10:00 AM
8:00 AM	<b>PF-000901 : Modeling of Intelligent Electromagnetic Sensor for Buried Tags</b> Adel Zitouni, Larbi Beheim, Fabien Belloir	
8:20 AM	<b>PF-001619 : A Non-Invasive Urination-Desire Sensing System based on Four-Electrodes Impedance Measurement Method</b> Katsunori Shida, Shin Yagami	
8:40 AM	<b>PF-004928 : Archive and Instruction of Hand Motion:Analysis and Evaluation of Hand Motion</b> Yu Kinoshita, Daisuke Takeda, Akinori Sasaki, Hiroshi Hashimoto, Chiharu Ishii	
9:00 AM	<b>PF-005991 : Novel Sensing Method for High Voltage Transmission Network Charging Currents</b> Osama Elmatboly, Marsha Walters, Abdullah Homaifar	
9:20 PM	<b>PF-011835 : Positioning in Underground Mines</b> Warren Hawkins, Brian Daku, Amfinn Prugger	
9:40 PM	<b>PF-015156 : Capacitive protection system for robot dedicated to the safety of humans.</b> Bernard Pottier, Lanto Rasolofondraibe, Danielle Nuzillard	

**THURSDAY 9**

<b>SS01-1</b> Co-Chairs Room / Time	<b>Renewable energy sources - 1</b> Milutin Jovanovic (UK) & Emil Levi (UK) <b>31.1.05– ROOM 8</b>	8:00 AM to 10:00 AM
8:00 AM	<b>PF-002119 : Maximum-Power-Extraction Algorithm for Grid-Connected PMSG Wind Generation System</b> Rong-Jong Wai, Chung-You Lin	
8:20 AM	<b>PF-002283 : Control method of a doubly-fed induction generator with automatic grid synchronization</b> Jungwoo Park, Kiwook Lee, Dongwook Kim	
8:40 AM	<b>PF-002356 : New State Observers and Sensorless Control of Wound Rotor Induction Generator (WRIG) at Power Grid with Experimental Characterization</b> Ioan Serban, Gheorghe-Daniel Andreeescu, Lucian Tutelea, Cristian Lasca, Frede Blaabjerg, Ion Boldea	
9:00 AM	<b>PF-005118 : Transient Stability Analysis of Grid-Connected Induction Generators Using Normal Form Method</b> Hui Li, Zhe Chen	
9:20 PM	<b>PF-013587 : Electromagnetic Considerations in the Design of Doubly-Fed Reluctance Generators for use in Wind Turbines</b> David G Dorrell, Ilario Scian, Erich M Schulz, Robert B Betz, Milutin Jovanovic	
9:40 PM	<b>PF-014923 : A Maximum Power Point Tracking Control Method Suitable for Multi-Parallel-Connected Compact Wind Power Generators with Self-Pitch Controlled Blades</b> Nobuyoshi Mutoh, Atsushi Nagasawa	

**THURSDAY 9**

<b>TPC1-4</b> Co-Chairs Room / Time	<b>Nonlinear control – I</b> Kuo-Kai Shyu (Taiwan) <b>31.1.07 – ROOM 9</b>	8:00 AM to 10:00 AM
8:00 AM	<b>PF-003106 : Adaptive Tracking for Nonlinear Plants Using Multiple Identification Models and State-Feedback</b> Ahmet Cezayirli, Kemal Ciliz	
8:20 AM	<b>PF-003689 : Large-Scale Traffic Network Control Based on Mixed Integer Non-linear System Formulation</b> Tatsuya Kato, YoungWoo Kim, Shigeru Okuma, Tatsuo Narikiyo	
8:40 AM	<b>PF-000906 : Design of Piecewise Linear LQ Control by Multivariable Circle Criterion for Dynamic Positioning System</b> Noriyuki Akasaka	
9:00 AM	<b>PF-012637 : Adaptive Fuzzy Integral-Backstepping Controller for Linear Induction Motor Position Control</b> Abdeljebar Hazzab, Ismail Khalil Bousserhane, Pierre Sicard, M. Rahli, M. Kamli, B. Mazari	
9:20 PM	<b>PF-012742 : Fuzzy Sliding Mode Based on Indirect Field Orientation for Induction Motor Drive</b> Ismail Khalil Bousserhane, Abdeljebar Hazzab, Pierre Sicard, M. Rahli, B. Mazari, M. Kamli	
9:40 PM	<b>PF-008001 : Delay-independent stability of reset control systems</b> Alfonso Baños, Antonio Barreiro	

**THURSDAY 9**

<b>TPC1-10</b> Co-Chairs Room / Time	<b>Motion control</b> Kuo-Kai Shyu (Taiwan) <b>33.1.09 – ROOM 10</b>	8:00 AM to 10:00 AM
8:00 AM	<b>PF-010502 : Optimization of Cascaded Position Control of Induction Motors using Compact Genetic Algorithms</b> Francesco Cupertino, Ernesto Mininno, Erika Lino, David Naso	
8:20 AM	<b>PF-001360 : Position Measurement of Crane Hook by Vision and Laser</b> Shunsuke Nara, Daisuke Miyamoto, Satoru Takahashi	
8:40 AM	<b>PF-013641 : Synthesis of Motor Motion Curves for Intermittent Indexing Tables with Minimized Positioning Time</b> Der-Min Tsay, Wei-Chih Shih	
9:00 AM	<b>PF-012238 : Novel non linear PD controller for the positioning system of a 2D Automated Visual Inspection Machine for Quality Control of SMD</b> Noé Perez-Arreortua, Francisco José Ruiz-Sánchez, Nicolas Plata-Ramírez	
9:20 PM	<b>PF-003336 : Critical Control Design for Fatigue Avoidance in Two-Inertia Systems</b> Toshiyuki Satoh, Naoki Saito	
9:40 PM	<b>PF-002882 : Backstepping Sliding Mode Control Applied to a Miniature Quadrotor Flying Robot</b> Tarek Madani, Abdelaziz Benallegue	

**THURSDAY 9**

<b>SS16-1</b> Co-Chairs Room / Time	<b>Advanced control and observation of AC drives - 1</b> Alain Glumineau (France) & Franck Betin (France) <b>33.1.10 – ROOM 11</b> 8:00 AM to 10:00 AM
8:00 AM	<b>PF-011282 : Position and speed estimation of a switched reluctance machine using current harmonic spectral estimation</b> Mickael Hilairet; Jaouad Mazouari; Halla Hannoun; Claude Marchand
8:20 AM	<b>PF-015601 : Sensorless Control of a PMSM Synchronous Motor at Low Speed Based</b> Reginaldo Miranda; Eisenhauer Fernandes; Cursino Jacobina; Antonio Lima; Alexandre Oliveira; Mauricio Correa
8:40 AM	<b>PF-014745 : Observer design for state and parameter estimation in induction motors with simulation and experimental validation</b> Gildas Besancon; Alexandru Ticlea
9:00 AM	<b>PF-015326 : Design and Evaluation of a PLL-Based Position Controller for Sensorless Vector Control of Permanent-Magnet Synchronous Machines</b> Rolando Burgos; Parag Kshirsagar; Alessandro Lidozzi; Jihoon Jang; Fred Wang; Dushan Boroyevich; Pedro Rodriguez
9:20 PM	<b>PF-014893 : Speed and Position Estimation for PM Synchronous Motor using self-compensated Back-EMF Observers</b> Marco Tursini; Roberto Petrella; Alessia Scafati
9:40 PM	<b>PF-015911 : Interconnected observers for sensorless induction motor in dq frame: Experimental tests</b> Dramane Traore; Jesus De Leon; Alain Glumineau; Luc Loron

**THURSDAY 9**

<b>TPC5-4</b> Co-Chairs Room / Time	<b>Image processing - III</b> Patrick Martin (France) & Fernando Pescador (Spain) <b>33.1.11 – ROOM 12</b> 8:00 AM to 10:00 AM
8:00 AM	<b>PF-000043 : Colour Object recognition combining Motion Descriptors</b> Fethi Smach, Cedric Lemaitre, Johel Miteran, Jean Paul Gauthier, Mohamed Abid
8:20 AM	<b>PF-009768 : Parametrization of a local invariant object recognition technique</b> Anant Choksiwong, Christophe Rosenberger, Bruno Emile
8:40 AM	<b>PF-013498 : Automated Crack Detection for Concrete Surface Image Using Percolation Model and Edge Information</b> Tomoyuki Yamaguchi, Shuji Hashimoto
9:00 AM	<b>PF-014591 : Segmentation of color image by Phi_Beta criterion and fuzzy theory</b> Abdelaziz El Matouat, Hassania Hamzaoui, Patrick Martin
9:20 PM	<b>PF-002332: ClairVoyance: A Fast and Robust Precision Mosaicing System for Gigapixel Images</b> Frank Nielsen, Noriyuki Yamashita
9:40 PM	<b>PF-012211 : 3D Image Analysis for Evaluating Internal Deformation / Fracture Characteristics of Materials</b> Mitsuru Nakazawa, Yoshimitsu Aoki, Yuji Kawai, Masakazu Kobayashi, Hiroyuki Toda

**THURSDAY 9**

<b>SS18-1</b> Co-Chairs Room / Time	<b>High precision motion control - 1</b> Roberto Oboe (Italy) and Makoto Iwasaki (Japan) <b>33.1.13 – ROOM 13</b> 8:00 AM to 10:00 AM
8:00 AM	<b>PF-002089 : Sliding-Mode Adaptive Controller for PZT Actuators</b> Asif Sabanovic, Shahzad Khan, Meltem Elitas, Karel Jezernik
8:20 AM	<b>PF-009016 : Robust Tracking Control of Optical Disk Recording System based on Sudden Disturbance Observer</b> Toshimasa Miyazaki, Kiyoshi Ohishi, Isao Shibutani, Daiichi Koide, Haruki Tokumaru
8:40 AM	<b>PF-009547 : High-Precision Positioning Control of Magnetic Levitation System</b> Jeong-Woo Jeon, Mitica Caraiani, Don-Ha Hwang, Joo-Hoon Lee, Dong-Sik Kang, Yong-Joo Kim, Sung-Shin Kim
9:00 AM	<b>PF-010421 : High Precision Force Control by Multi-Sensor based Disturbance Observer</b> Seiichiro Katsura, Kouhei Irie, Kiyoshi Ohishi
9:20 PM	<b>PF-013501 : 2DOF Control-Based Fast and Precise Positioning Using Disturbance Observer</b> Makoto Iwasaki, Motohiro Kawafuku, Hiromu Hirai
9:40 PM	<b>PF-013552 : Control Parameter Optimization in the Hardware-in-the-loop System using Novel Search Algorithm</b> Sehoon Oh, Yoichi Hori

**THURSDAY 9**

<b>TPC7-5</b> Co-Chairs Room / Time	<b>Neural networks and fuzzy logic - II</b> Nikolaos Tsourverloudis (Greece) & Pau-Lo Hsu (Taiwan) <b>33.1.14 – ROOM 14</b> 8:00 AM to 10:00 AM
8:00 AM	<b>PF-002488 : Neural Control of a Fully Actuated Biped Robot</b> Nasser Sadati, Kaveh Hamed
8:20 AM	<b>PF-003743 : Global adaptive learning control of robotic manipulators by output error feedback</b> Stefano Liuzzo, Patrizio Tomei
8:40 AM	<b>PF-005568 : Improving the RTR Growing Functional Module</b> Jerome Leboeuf
9:00 AM	<b>PF-009857 : Environmental Impedance Estimation and Imitation in Haptics by Sliding Mode Neural Networks</b> Baris Yalcin, Kouhei Ohnishi
9:20 PM	<b>PF-012963 : Hybrid Neural Fuzzy Sliding Mode Control of Flexible-Joint Manipulators with Unknown Dynamics</b> Hicham Chaoui, Wail Gueaieb, Mustapha Yagoub, Pierre Sicard
9:40 PM	

<b>SS11-1</b>	<b>Thermal analysis in electrical machines and drives</b>
Co-Chairs	Aldo Boglietti (Italy) & Keith Bradley (UK)
Room / Time	<b>33.1.15 – ROOM 15</b> 8:00 AM to 10:00 AM
<b>8:00 AM</b>	<b>PF-13765 : Thermal Design of an Integrated Motor Drive</b> Stephen Pickering, Frederic Thovex, Pat Wheeler
<b>8:20 AM</b>	<b>PF-13706 : Temperatures evaluation in an integrated motor drive for traction</b> Alberto Tenconi, Francesco Profumo, Dario Gallo
<b>8:40 AM</b>	<b>PF-1531 : Reduced models for temperature control of a power drive with variable cooling fluid flow</b> Patrick Lagonotte, Cédric Rouaud, Alain Alexandre
<b>9:00 AM</b>	<b>PF-15571 : Thermal modelling of TEFC alternators</b> Carlos Mejuto, Abdeslam Mebarki, Dave Staton, Nazar Al-Khaya, Markus Mueller
<b>9:20 PM</b>	<b>PF-000983 : Comparison of Losses and Thermal Performance of a Three-Level Three-Phase Neutral-Point-Clamped dc-ac Converter</b> Sergio Busquets-Monge, Josep Bordonau, Jose A. Beristain,
<b>9:40 PM</b>	<b>PF-14206 : FEM and Lumped Circuit Thermal Analysis of External Rotor Motor</b> David Staton, Alessandro Tassi

**THURSDAY 9**

<b>TPC3 - 13</b>	<b>Fuel cell and DPC</b>
Co-Chairs	Daniel Hissel (France) & Ali Emadi (USA)
Room / Time	<b>30.-1.4 – ROOM 1</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-003520 : Predictive Direct Power Control - A New Control Strategy for DC/AC Converters</b> Sergio Aurtenechea, Miguel Angel Rodríguez, Estanis Oyarbide, José Ramón Torrealday
<b>11:20 AM</b>	<b>PF-011126 : Optimized Direct Power Control Strategy using Output Regulation Subspaces and Pulse Width Modulation</b> Sergio Vazquez, Jose I. Leon, Juan A. Sanchez, Eduardo Galvan, Juan M. Carrasco, Leopoldo G. Franquelo, Eugenio Dominguez, Gerardo Escobar
<b>11:40 AM</b>	<b>PF-000051 : Static Modelling by Neural Networks of a PEM Fuel Cell</b> Mustapha Hatti, Mustapha Tioursi, Wahid Nouibat
<b>12:00 AM</b>	<b>PF-010898 : Novel Zero-Voltage Switching Control Methods for a Multiple-Input Converter Interfacing a Fuel Cell and Supercapacitor</b> Haimin Tao, Jorge L. Duarte, Marcel A.M. Hendrix
<b>12:20 PM</b>	<b>PF-015113 : A Three-Port Three-Phase DC-DC Converter for Hybrid Low Voltage Fuel Cell and Ultracapacitor</b> Danwei Liu, Hui Li
<b>12:40 PM</b>	

**THURSDAY 9**

<b>TPC3 - 14</b>	<b>Matrix converter</b>
Co-Chairs	Christian Klumpner (UK) & Jon Clare (UK)
Room / Time	<b>30.-1.2– ROOM 2</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-004088 : Switching Frequency Behaviour for a Practical Matrix Converter</b> Jon Andreu, Iñigo Martínez de Alegría, Iñigo Kortabarria, Salvador Ceballos, Igor Gabiola
<b>11:20 AM</b>	<b>PF-012459 : A New Three-Level Sparse Indirect Matrix Converter</b> Christian Klumpner, Meng Lee, Pat Wheeler
<b>11:40 AM</b>	<b>PF-000213 : A Novel Four-leg Matrix Converter</b> Fan Yue, Pat Wheeler, Jon C. Clare
<b>12:00 AM</b>	<b>PF-012165 : A new control scheme for an hybrid two-stage matrix converter with improved efficiency</b> Sebastien Mariethoz
<b>12:20 PM</b>	<b>PF-009342 : Matrix Converter Protection for More Electric Aircraft Applications</b> Lee Empringham, Liliana de Lillo, Pat Wheeler, Jon Clare
<b>12:40 PM</b>	<b>PF-002895 : A Modulation Strategy To Reduce Common-Mode Voltage For Current-Controlled Matrix Converters</b> Hua Lin, Bi He, Xiaofeng Zhang

**THURSDAY 9**

<b>TPC3 - 15</b>	<b>Rectifier</b>
Co-Chairs	Augustin Mpanda (France) & Frede Blaabjerg (Denmark)
Room / Time	<b>30.-1.1– ROOM 3</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-014303 : A Method to Decrease Input Current Harmonics of Three-Phase Diode Rectifier by Pulse-Doubler Scheme</b> Yasuyuki Nishida, Kazuaki Mino
<b>11:20 AM</b>	<b>PF-004952 : Performance Comparison of Voltage Mode Control and Current Mode Control of a Three-Phase PWM Rectifier based on a Dual SISO Model</b> Bo Yin, Ramesh Oruganti, Sanjib Kumar Panda, Ashoka K. S. Bhat
<b>11:40 AM</b>	<b>PF-006297 : Three-Phase Rectifier Applying Active Current Injection</b> Nimrod Vázquez, Heriberto Rodríguez, Claudia Hernández
<b>12:00 AM</b>	<b>PF-006629 : Enhanced Voltage-Boost Inverter and Rectifier</b> Poh Chiang Loh, Frede Blaabjerg, JingXiang Yao, Ting Fang Xu
<b>12:20 PM</b>	<b>PF-001325 : High Dynamic Control of a PWM Rectifier using Harmonic Elimination</b> Cesar Silva, Jorge Oyarzún
<b>12:40 PM</b>	<b>PF-013951 : Modulations for Three-Phase AC-DC Voltage Source Rectification and DC-Three-Phase AC Voltage Source Inversion Using General Direct Space Vector Approach</b> Keping You, M. F. Rahman

**THURSDAY 9**

<b>TPC2 - 5</b>	<b>Observer techniques</b>
Co-Chairs	Teresa Orlowska-Kowalska (Poland) and Peter Mutschler (Germany)
Room / Time	<b>30.-1.3– ROOM 4</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-011525 : Comparison of two nonlinear speed observers for induction motors</b> Marco Gallegos, Ricardo Álvarez, Ciro Núñez, Uaslp, Francisco Pérez-Pinal
<b>11:20 AM</b>	<b>PF-001945 : Experimental designs for the tuning of a redundant position observer on a PMSM drive</b> Stéphane Caux, Pascal Maussion, Clément Loubet, Maurice Fadel
<b>11:40 AM</b>	<b>PF-007749 : Modified Passivity-Based Control of Switched-Reluctance Motor with Speed and Load Torque Observers</b> Milad Falahi, Farzad R. Salmasi, Caro Lucas
<b>12:00 AM</b>	<b>PF-003007 : Low speed operation improvement of MRAS sensorless vector control induction motor drive using neural network flux observers</b> Shady M Gadoue, Damian Giaouris, John W Finch
<b>12:20 PM</b>	<b>PF-003867 : Sliding Mode Observer for Rotor Faults Diagnosis</b> Lane Maria Rabelo Baccarini, Walmir Matos Caminhas, Benjamim Rodrigues de Menezes, Homero Nogueira Guimarães, Leandro Henrique Batistal
<b>12:40 PM</b>	<b>PF-002026 : Sliding-Mode Observer with Resistances or Speed Adaptation for Field-Oriented Induction Motor Drives</b> Ciro Picardi, Francesco Scibilia

**THURSDAY 9**

<b>TPC2 - 11</b>	<b>Electrical machines - II</b>
Co-Chairs	Zareh Soghomonian (USA) and Andras Lelkes (Germany)
Room / Time	<b>31.1.71 – ROOM 5</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-010111 : Analytical modelling of electromagnetic origin vibrations in an induction machine supplied by high power PWM inverter</b> Emmanuel Leleu, Abdellatif Miraoui, Christophe Espanet, Sami Siala
<b>11:20 AM</b>	<b>PF-003026 : Time Stepping Simulation of Synchronous Reluctance Motors Using Non Linear Reluctance Network Method</b> Tsarafidy Raminosoa, Ignace Rasoaianarivo, Francois-Michel Sargos
<b>11:40 AM</b>	<b>PF-014885 : Qualitative Investigation of Force Density Components in Electromechanical Energy Conversion Process</b> Wei Jiang, Mehdi Moallem, Babak Fahimi, Steven Pekarek
<b>12:00 AM</b>	<b>PF-007927 : A Micro Linear Motor with Integrated Passive Magnetic Guidance</b> Ralf Gehrking, Sven Demmig, Bernd Ponick, Marco Feldmann, Stephanus Büttgenbach
<b>12:20 PM</b>	<b>PF-002321 : Physical Basis for the Variation of Lamination Core Loss Coefficients as a Function of Frequency and Flux Density</b> Tsakani Lotten Mthombeni, Pragasen Pillay
<b>12:40 PM</b>	<b>PF-014974 : Dynamic Analysis of Synchronous Reluctance Motor Drives Based on Simulink and Finite Element Model</b> Marco Villani, Franco Parasiliti, Alessandro Tassi

**THURSDAY 9**

<b>TPC2 - 17</b>	<b>Applications in power generation</b>
Co-Chairs	Eric Monmasson (France) & Li Ran (UK)
Room / Time	<b>31.1.01 – ROOM 6</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-008303 : Predictive control of a doubly-fed induction generator connected to an isolated grid</b> Nicolas Patin, Wissem Naouar, Eric Monmasson, Jean-Paul Louis
<b>11:20 AM</b>	<b>PF-004024 : A simple and efficacious control system for stand alone generation plants equipped with induction machines</b> Diego Iannuzzi, Luigi Piegari, Stefano Baratto, Umberto Macri, Andrea Del Pizzo
<b>11:40 AM</b>	<b>PF-004015 : Compound operations of asynchronous generator and PWM inverters for passive ac network supply</b> Diego Iannuzzi, Pietro Tricoli, Enrico Pagano, Salvatore D'arco
<b>12:00 AM</b>	<b>PF-010219 : A Stirling Micro Cogenerator Emulator</b> Isabel Garcia Burrel, Laurent Prévond, Sandrine Le Ballois, Eric Monmasson
<b>12:20 PM</b>	<b>PF-006505 : A Variable Frequency PWM Rectifier for Wind Driven Induction Generators</b> Kristian E. Medri, Bin Wu
<b>12:40 PM</b>	<b>PF-007331 : Comparative study of three modelling methods of synchronous generator</b> Emile Mouni, Slim Tnani, Gérard Champenois

**THURSDAY 9**

<b>TPC4 - 4</b> Co-Chairs Room / Time	<b>Systems integration</b> Philippe Benech (France) <b>31.1.03 – ROOM 7</b>	11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-000345 : Compact Modeling of MOSFET with VHDL-AMS language</b> Lyse-Aline Coyitangiye, Richard Grisel	
<b>11:20 AM</b>	<b>PF-000596 : VHDL-AMS modeling for virtual prototyping of Very Large Scale Integration architecture for Direct Torque Control of an AC machine</b> Philippe Poure, Serge Weber	
<b>11:40 AM</b>	<b>PF-002206 : Extraction of equivalent electrical models for damascene MIM capacitors in a standard 120-nm CMOS technology for ultra wide band applications</b> Pascal Lemoigne, Jean-Daniel Arnould, Pierre-Eric Bailly, Nicolas Corrao, Philippe Benech, Marilyne Thomas, Alexis Farcy, Joaquim Torres	
<b>12:00 AM</b>	<b>PF-003239 : Chopper stabilized CMOS integrated front-end for magnetic field measurement</b> Vincent Frick, Joris Pascal, Jean-Philippe Blonde, Luc Hebrard	
<b>12:20 PM</b>	<b>PF-006041 : Development of a FPGA-based SoC Instrument for the characterization of High Sensitivity QCM Oscillator Sensors</b> Maria Jose Moure, Maria Dolores Valdes, Pablo Rodiz, Loreto Rodriguez-Pardo, Jose Fariña	
<b>12:40 PM</b>	<b>PF-009911 : Differential amplifier using polysilicon TFTs processed at low temperature to be integrated with TFT Hall sensor</b> Emmanuel Jacques, France Le Bihan, Samuel Crand, Tayeb Mohammed-Brahim	

**THURSDAY 9**

<b>SS01-2</b> Co-Chairs Room / Time	<b>Renewable energy sources - 2</b> Giuseppe Buja (Italy) & Jon Clare (UK) <b>31.1.05 – ROOM 8</b>	11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-002364 : Analysis And Design Of Four-Leg Fuel Cell Boost Converter</b> Li-Hsiu Chen, Jonq-Chin Hwang, Sheng-Nian Yeh, Ging-Chou Yu	
<b>11:20 AM</b>	<b>PF-005401 : Practical power control design of a NPC multilevel inverter for grid connection of a renewable energy plant based on a FESS and a Wind generation</b> Omar Bouhali, Bruno Francois, Christophe Saudemont, El Madjid Berkouk	
<b>11:40 AM</b>	<b>PF-006912 : Investigation of a Low-Cost Grid-Connected Inverter for Small-Scale Wind Turbines Based on a Constant-Current Source PM Generator</b> David M. Whaley, Gurhan Ertasgin, Wen L. Soong, Nesimi Ertugrul, James Darbyshire, Hooman Dehboneyi, Chem V. Nayar	
<b>12:00 AM</b>	<b>PF-007579 : A study on the Specification Decision Method of AF-SMES system considering internal fault condition</b> Kim ARong, Park Minwon, Yu In-Keun	
<b>12:20 PM</b>	<b>PF-009385 : Electronic Load Controller for Stand-Alone Generating Units with Renewable Energy Sources</b> Ioan Serban, Catalin Ion, Corneliu Marinescu, Marcian N. Cirstea	
<b>12:40 PM</b>	<b>PF-011568 : Current-Fed Full Bridge Converters for Fuel Cell Systems Connected to the Three Phase Grid</b> Malte Mohr, Friedrich-W. Fuchs	

**THURSDAY 9**

<b>TPC1 - 5</b>	<b>Nonlinear control - II</b>
Co-Chairs	Kamal Al-Haddad (Canada)
Room / Time	<b>31.1.07 – ROOM 9</b>
	11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-000663 : Experimental Verification and Comparison of MAFC Method and D-Q Method for Selective Harmonic Detection</b> Lewei Qian, David Cartes, Hui Li
<b>11:20 AM</b>	<b>PF-011339 : Passivity-Based Control for a single-Phase, Full Bridge, Active Rectifier</b> Manuel Flota, Jesus Lira, Ciro Nunez, Ricardo Alvarez, Felipe Pazos
<b>11:40 AM</b>	<b>PF-000728 : Dynamical synchronization for coupled oscillators: application to antenna arrays</b> Florin Huta, Sebastien Cauet, Frederic Launay, Patrick Coirault
<b>12:00 AM</b>	<b>PF-002933 : Sliding-Mode Control for an Underactuated Overhead Crane System</b> Kuo-Kai Shyu, Cheng-Lung Jen, Li-Jen Shang
<b>12:20 PM</b>	<b>PF-002992 : A New Procedure of Time-Varying Switching Plane Design</b> Aleksandra Nowacka, Andrzej Bartoszewicz
<b>12:40 PM</b>	<b>PF-003018 : Moving Switching Plane Selection for the Third Order System Subject to Input and Acceleration Constraints</b> Aleksandra Nowacka, Andrzej Bartoszewicz

**THURSDAY 9**

<b>TPC1 - 11</b>	<b>Process control</b>
Co-Chairs	Pierre Melchior (France)
Room / Time	<b>33.1.09 – ROOM 10</b>
	11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-001685 : Modelling of Nuclear Reactor and Power Control by Extended Frequency Method</b> Yoon Joon Lee, Man Gyun Na
<b>11:20 AM</b>	<b>PF-003142 : Operation of the ATLAS Experiment: Organization of the Detector Controls and the Data Acquisition System</b> Alex Barriuso Poy, John Erik Sloper, Viatcheslav Khomutnikov, Giovanna Lehmann Miotto
<b>11:40 AM</b>	<b>PF-006157 : Development of a Fuzzy Logic Control System in Matlab for an Air Impingement Oven</b> Davis Harbour, Terry W Martin
<b>12:00 AM</b>	<b>PF-007641 : Algebraic design of multi-rate control systems for environments with limited random delays</b> Angel Cuenca, Julian Salt, Pedro Albertos, Vicente Casanova
<b>12:20 PM</b>	<b>PF-001919 : Design of RealTime Control Software Based On QNX</b> Yaguang Kong
<b>12:40 PM</b>	<b>PF-012114 : Sliding Mode Control Using Integrator Controller and Implementation For a Three-Tank System</b> Sofiane Mahieddine-Mahmoud, Larbi Chrif-Alaoui, Vincent Van Assche, Jean-Marie Castelain

**THURSDAY 9**

<b>SS16 - 2</b>	<b>Advanced control and observation of AC drives - 2</b>
Co-Chairs	Luc Dugard (France) & Luc Loron (France)
Room / Time	<b>33.1.10 – ROOM 11</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-012807 : Decoupling Modeling and Control of Six-Phase Induction Machines Under Open Phase Fault Conditions</b> Raed Alcahreia; Babak Nahidmobarakeh; Lotfi Baghli; Franck Betin; Gerard-Andre Capolino
<b>11:20 AM</b>	<b>PF-014125 : Indirect Field Oriented Control of an Integrated Starter Generator</b> Dorin Lucache; Vasile Horga; Mihai Albu; Marcel Ratoi
<b>11:40 AM</b>	<b>PF-004294 : A Robustly Stable PI Controller For The Doubly-Fed Induction Machine</b> Carles Batlle; Arnau Doria-Cerezo; Romeo Ortega
<b>12:00 AM</b>	<b>PF-015784 : Discrete-time modelling of induction motors with consideration of magnetic saturation</b> Abderrahim Elfadili; Fouad Giri; Hamid Ouadi; Luc Dugard
<b>12:20 PM</b>	<b>PF-011517 : Flatness-Based Control of an Induction Machine Fed via Voltage Source Inverter - Concept; Control Design and Performance Analysis</b> Joerg Dannehl; Friedrich W. Fuchs
<b>12:40 PM</b>	<b>PF-013757 : Easy and Efficient Tuning of PI Controllers for Electrical Drives</b> Tiemele Ane; Luc Loron

**THURSDAY 9**

<b>TPC5 – 5</b>	<b>Speech &amp; signal processing - I</b>
Co-Chairs	Mark Hunter (USA) & Olivier Fourt (France)
Room / Time	<b>33.1.11 – ROOM 12</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-000868 : Direction-Finding Experimentation through Acoustic Sensor Fabrication</b> Mark Hunter, Dale Joachim
<b>11:20 AM</b>	<b>PF-003430 : Inverse Filtering Approximation for Impacting Signals Estimation Using a Multilayer Neural Network</b> Erik Molino-Minero-Re, Mariano López-García, Antoni Manuel-Lazaro, Joaquin del Rio-Fernandez
<b>11:40 AM</b>	<b>PF-005347 : A DSP structure authorizing reduced-bandwidth DC/DC Converters for Dynamic Supply of RF Power Amplifiers in Wideband Applications</b> Albert Cesari, Angel Cid-Pastor, Corinne Alonso, Jean-Marie Dilhac
<b>12:00 AM</b>	<b>PF-005878 : Analysis of Traction System Time-Varying Signals using ESPRIT Subspace Spectrum Estimation Method</b> Zbigniew Leonowicz, Tadeusz Lobos
<b>12:20 PM</b>	<b>PF-006432 : On HMM Speech Recognition Based on Complex Speech Analysis</b> Tatsuhiko Kinjo, Keiichi Funaki
<b>12:40 PM</b>	<b>PF-007153 : Separation of a polynomial phase signals mixture using sparsity</b> Olivier Fourt, Messaoud Benidir

<b>SS18 – 2</b>	<b>High precision motion control - 2</b>
Co-Chairs	Makoto Iwasaki (Japan) & Roberto Oboe (ITA)
Room / Time	<b>33.1.13 – ROOM 13</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-003425 : Dynamic Geometric Compensation for Gantry Stage using Iterative Learning Control</b> Chek Sing Teo, Kok Kiong Tan, Ser Yong Lim
<b>11:20 AM</b>	<b>PF-005177 : A Realization of Haptic Skill Database by Bilateral Motion Control</b> Tomoyuki Shimono, Seiichiro Katsura, Kouhei Ohnishi
<b>11:40 AM</b>	<b>PF-007188 : Bilateral Control for Fine Processing Using Virtual Grasping/Manipulating Robots</b> Ryogo Kubo, Kouhei Ohnishi
<b>12:00 AM</b>	<b>PF-009237 : Decoupling Control of Electric Power Steering System with Variable Gear Transmission System</b> Yoshifumi Morita, Kentaro Torii, Norio Tsuchida, Hiroyuki Ukai, Makoto Iwasaki, Nobuyuki Matsui, Jiro Hayashi, Noriyuki Ido, Hiroshi Ishikawa
<b>12:20 PM</b>	<b>PF-010197 : Anti-slip Readhesion Control of Electric Commuter Train Based on Disturbance Observer Considering Bogie Dynamics</b> Kiyoshi Ohishi, Satoshi Kadokawa, Yosuke Shimizu, Takashi Sano, Shinobu Yasukawa, Takafumi Koseki
<b>12:40 PM</b>	

<b>TPC7 – 6</b>	<b>Mobile robots</b>
Co-Chairs	Luiz Borges da Silva (Brazil & Maki Habib (Japan)
Room / Time	<b>33.1.14 – ROOM 14</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-002053 : Switched Feedback Tracking Control of a Nonholonomic Mobile Robot</b> Mahmut Reyhanoglu, Theo Geluk
<b>11:20 AM</b>	<b>PF-003158 : Dynamic Modeling and Centralized Formation Control of Mobile Robots</b> Celso De La Cruz, Ricardo Carelli
<b>11:40 AM</b>	<b>PF-003412 : Observer-Based Drive-Control For Self-Balanced Vehicles</b> Klaus Hofer
<b>12:00 AM</b>	<b>PF-006521 : Design and Control of a Four Steered Wheeled Mobile Robot</b> Michel Lauria, Isabelle Nadeau, Pierre Lepage, Yan Morin, Patrick Giguère, Frédéric Gagnon, Dominic Létourneau, François Michaud
<b>12:20 PM</b>	<b>PF-008761 : A New Approach to the Sewer Pipe Inspection: Fully Autonomous Mobile Robot "KANTARO"</b> Amir Ali Forough Nassiraei, Yoshinori Kawamura, Alireza Ahrary, Yoshikazu Mikuriya, Kazuo Ishii
<b>12:40 PM</b>	<b>PF-014834 : Maneuvering Strategies for Four-Wheel Drive, Four-Wheel Steer Mobile Robots Using Curvatures Based on Weingarten-Maps</b> M. Kursat Yalcin, S. Murat Yesiloglu, Mustafa Dal, Hakan Temeltas

**SS11 – 2**

Co-Chairs

Room / Time

**Thermal analysis in electrical machines and drives**

Aldo Boglietti (Italy) & Patrick Lagonotte (France)

**33.1.15 – ROOM 15**

11:00 AM to 1:00 PM

- 11:00 AM PF-1388 : Coupling control volume modeling in fluid and lumped thermal model - Application to an induction machine**  
Jean-François Trigeol, Yves Bertin, Patrick Lagonotte
- 11:20 AM PF-14281 : Heat Transfer and Thermal Design of Finned Frames for TEFC Variable Speed**  
Anibal Valenzuela, Juan Tapia
- 11:40 AM PF-14184 : Convection Heat Transfer and Flow Calculations Suitable for Analytical Modelling of Electric Machines**  
David Staton, Andrea Cavagnino
- 12:00 AM PF-14427 : Thermal and fluid dynamical aspects in the design of an Axial Flux Permanent Magnet Synchronous Machine with Soft Magnetic Compound Stator**  
Fabrizio Marignetti
- 12:20 PM PF-13684 : Design of Brushless Permanent Magnet Motors – A Combined Electromagnetic and Thermal Approach to High Performance Specification**  
David G Dorrell, David A Staton, Malcolm I McGilp
- 12:40 PM PF-5282 : Electromagnetic and Thermal Aspects of Special Permanent Magnet Generators for Short Term, Controlled Damping of Mechanical Oscillations**  
Antonino Di Gerlando, Gianmaria Foglia, Roberto Perini

**THURSDAY 9**

<b>TPC3 – 16</b>	<b>PWM</b>
Co-Chairs	Thierry Meynard (France) & Emil Levi (UK)
Room / Time	<b>30.-1.4 – ROOM 1</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-005932 : A Solution for Three-Phase System Unbalance Based on PWM AC Choppers</b> Bernardo Cougo, Thierry Meynard
<b>3:20 PM</b>	<b>PF-001450 : Simulation of a space vector PWM controller for a three-level voltage-fed inverter motor drive</b> Ayse Kocalmis, Sedat Sunter
<b>3:40 PM</b>	<b>PF-006203 : An Active Snubber-Energy-Recovery Unit at PWM Converter to Achieve High Efficiency</b> Makoto Yatsu, Naoya Eguchi
<b>4:00 PM</b>	<b>PF-001612 : A Multi-Modular System Based On Parallel-Connected Multilevel Flying Capacitor Converters Controlled with Fundamental Frequency SPWM</b> Chunmei Feng, Jun Liang, Vassilios G. Agelidis, Tim C. Green
<b>4:20 PM</b>	<b>PF-000091 : A PWM Scheme for a Five-Phase VSI Supplying a Five-Phase Two-Motor Drive</b> Atif Iqbal, Emil Levi, Martin Jones, Slobodan N. Vukosavic
<b>4:40 PM</b>	<b>PF-005398 : Minimization of DC Reactor and Operation Characteristics of Direct-Power-Controlled Current-Source PWM Rectifier</b> Toshihiko Noguchi, Akira Sato, Daisuke Takeuchi

**THURSDAY 9<sup>TH</sup>**

<b>TPC3 – 17</b>	<b>DC-DC converter</b>
Co-Chairs	Jose Pinheiro (Portugal) & Alain Bouscayrol (France)
Room / Time	<b>30.-1.2 – ROOM 2</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-015296 : Repetitive Ripple Estimation in Multi-sampling Digitally Controlled dc-dc Converters</b> Elisabetta Tedeschi, Paolo Mattavelli, Daniele Trevisan, Luca Corradini
<b>3:20 PM</b>	<b>PF-008842 : A No DC-Gain Error Small-Signal Model for the Zero-Voltage-Switching Phase-Shift-Modulated Full-Bridge DC-DC Converter</b> Cleber Zanatta, Jose Renes Pinheiro
<b>3:40 PM</b>	<b>PF-015229 : Communication on Power Lines Using Frequency and Duty-Cycle Modulation in digitally Controlled dc-dc Converters</b> Walter Stefanutti, Paolo Mattavelli, Stefano Saggini, Luigi Panseri
<b>4:00 PM</b>	<b>PF-002495 : Switched Coupled-Inductor Cell for DC-DC Converters with Very Large Conversion Ratio</b> Boris Axelrod, Yefim Berkovich, Adrian Ioinovici
<b>4:20 PM</b>	<b>PF-004588 : Multichannel DC-DC Converter's Efficiency Optimisation by variable Number of active Channels</b> Lukas Fleischli, Sylvain Lemoufouet, Alfred Rufer
<b>4:40 PM</b>	<b>PF-001261 : High-Frequency Bi-Directional DC/DC Converter Using Two Inductor Rectifier</b> Luis Flores-Oropeza, Oscar Garcia, Jesus Oliver, Jose Antonio Cobos

<b>TPC3 – 18</b>	<b>Power converters - 1</b>
Co-Chairs	Ali Emadi (USA) & Johann W. Kolar (Switzerland)
Room / Time	<b>30.-1.1 – ROOM 3</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-012653 : Fault Detection on Multicell Converter Based on Output Voltage Frequency Analysis</b> Pablo Lezana, Jose Rodriguez, Ricardo Aguilera, Cesar Silva
<b>3:20 PM</b>	<b>PF-012076 : A Generalized High Voltage Gain Boost Converter Based on Three-State Switching Cell</b> René Bascopé, Fernando Antunes, Demercil Oliveira, Grover Bascopé, Gustavo Branco, Samuel Araújo
<b>3:40 PM</b>	<b>PF-011312 : Dynamic Model of One-Cycle control for converters operating in CCM and DCM</b> Nicola Femia, Mario Fortunato, Giovanni Spagnuolo, Giovanni Petrone, Massimo Vitelli, Luigi Egiziano
<b>4:00 PM</b>	<b>PF-011347 : Combination of Buck and Boost Modes to Minimize Transients in the Output of a Positive Buck-Boost Converter</b> Arindam Chakraborty, Alireza Khaligh, Ali Emadi
<b>4:20 PM</b>	<b>PF-003735 : Optimized Pulse Patterns for the 5-Level ANPC Converter for High Speed High Power Applications</b> Joerg Meili, Srinivas Ponnaluri, Leonardo Serpa, Peter K. Steimer, Johann W. Kolar
<b>4:40 PM</b>	<b>PF-004111 : Analysis and Stabilization of a DC/DC Buck-Boost Converter Feeding Constant Power Loads in Parallel with Conventional Loads in Vehicular Systems</b> Alireza Khaligh, Amir Rahimi, Arindam Chakraborty, Ali Emadi

<b>TPC2 – 6</b>	<b>Induction motor drives</b>
Co-Chairs	Kouki Matsuse (Japan) and Lech M. Grzesiak (Poland)
Room / Time	<b>30.-1.3 – ROOM 4</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-012122 : High performance torque and flux control for multilevel inverter fed induction motors</b> José Rodríguez, Samir Kouro, Rafael Bernal
<b>3:20 PM</b>	<b>PF-006769 : Performance of the Inverter with the Super Capacitor for Vector Controlled Induction Motor Drives</b> Koichi Yamashita, Takeo Tomida, Kouki Matsuse
<b>3:40 PM</b>	<b>PF-005495 : Optimisation of Output Filters for Inverter Fed Drives</b> Stefan Poehler, Axel Mertens, Rainer Sommer
<b>4:00 PM</b>	<b>PF-012726 : Torque Regulation by Means of Stator Flux Control for Induction Machines</b> Hernan Miranda, Cesar Silva, Jose Rodriguez
<b>4:20 PM</b>	<b>PF-008591 : Improvements in Direct Torque Control of Induction Motor Supplied by CSI</b> Aleksandar B. Nikolic, Borislav I. Jefteric
<b>4:40 PM</b>	<b>PF-013331 : Improvement of Indirect Rotor Flux Orientation Control of Induction Motors with Skewed Rotor Bars</b> Nadia Salvatore, Giuseppe L. Cascella, Davide Cascella, Silvio Stasi

**THURSDAY 9**

TPC2 – 12	<b>Electrical machines - I</b>
Co-Chairs	Fahimi, Babak (USA) & Christophe Espanet (France)
Room / Time	<b>31.1.71 – ROOM 5</b> 3:00 PM to 5:00PM
3:00 PM	<b>PF-003935 : Iron Losses Prediction With PWM Supply Using Low and High Frequency Measurements: Analysis and Results Comparison</b> Aldo Boglietti, Andrea Cavagnino, Zbigniew Gmyrek
3:20 PM	<b>PF-015814 : Analytical modelling of high speed electrical machines</b> Mathieu Couderc, Carole Henaux, Bertrand Nogaredé
3:40 PM	<b>PF-013137 : A New High Frequency Modeling Technique of Travelling Waves in Long Cable PWM Drives</b> Saïd Amarir, Kamal Al-Haddad
4:00 PM	<b>PF-001163 : Modeling of PM-PM Dual Mechanical Ports Electric Machines</b> Zhao Feng, Wen Xuhui, Gao Jinwen
4:20 PM	<b>PF-000507 : Combined Analytical-Numerical Approach for the Modeling and Analysis of Three-phase Transformers</b> Basile Kawkabani, Gilles Rosselet, Jean-Jacques Simond
4:40 PM	

**THURSDAY 9**

TPC2 – 18	<b>Electrical machines - IV</b>
Co-Chairs	Ali Emadi (USA) & Babak Fahimi (USA)
Room / Time	<b>31.1.01 – ROOM 6</b> 3:00 PM to 5:00PM
3:00 PM	<b>PF-002569 : Study on the Permanent Magnet Demagnetization Fault in Permanent Magnet Synchronous Machines</b> Javier A. Rosero, Jordi Cusidó, Antoni García-Espinosa, Juan Antonio Ortega, Luis Romeral
3:20 PM	<b>PF-008184 : A Control of the MMF Space Harmonic Parasitic Torques in the concentrated winding AC Machine Using Skew angle Optimization</b> Hyun Rok Cha, Cheol Ho Yun, Ta Euk Jung, Hyung Mo Kim, Jeong Cheol Kim, Seung Hun Baek
3:40 PM	<b>PF-000668 : Losses Minimization of Two Asymmetrical Windings Induction Motor Based on Swarm Intelligence</b> Amr Amin, Mohamed El-korfolly, Abd Alla Sayed, Omar Hegazy
4:00 PM	<b>PF-008559 : The effect of rotor eccentricity on the radial and tangential electromagnetic stresses in synchronous machines</b> Lucia Frosini, Paolo Pennacchi
4:20 PM	<b>PF-014788 : Spread spectrum strategies study for induction motor vibratory and acoustic behavior</b> Vincent Lanfranchi, Jean Le Besnerais, Michel Hecquet, Guy Friedrich
4:40 PM	<b>PF-004723 : Electromagnetic Modeling of Switched Reluctance Motor Using Finite Element Method</b> Jawad Faiz, Babak Ganji, Rik W. De Doncker, Jens Fiedler

**THURSDAY 9**

<b>TPC4 – 5</b>	<b>Intelligent/micro sensors and actuators</b>
Co-Chairs	Nobutaka Tsujuchi (Japan) & Ron Lumia (USA)
Room / Time	<b>31.1.03 – ROOM 7</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-000841 : Measuring the Load-Carrying Capability of IPMC Microgripper Fingers</b> Ujwal Deole, Ron Lumia
<b>3:20 PM</b>	<b>PF-001793 : Partially-Rotating Piezoelectric Actuator to Assist Cell Penetration in Intra-Cytoplasmic Sperm Injection</b> Andi Sudjana Putra, Sunan Huang, Kok Kiong Tan, Sanjib Kumar Panda, Tong Heng Lee
<b>3:40 PM</b>	<b>PF-006645 : Development of a low pressure driven pneumatic actuator and its application to a robot hand</b> Nobutaka Tsujuchi, Takayuki Koizumi, Shigeki Shirai, Tatsuwo Kudawara, Yasunori Ichikawa
<b>4:00 PM</b>	<b>PF-009288 : Smart generator for ultrasonic applications</b> Frederic Coutard, Patrick Schweitzer, Etienne Tisserand
<b>4:20 PM</b>	<b>PF-010243 : Bi-directional Gap Closing MEMS Actuator Using Timing and Control Techniques</b> John E. Rogers, Phillip M. Ozmun, John Y. Hung, Robert N. Dean
<b>4:40 PM</b>	<b>PF-011223 : A Short-Stroke Permanent Magnet Aerospace Actuator with High Force-to-Mass Ratio</b> Felix Langley, Phil Mellor

**THURSDAY 9**

<b>SS06</b>	<b>Distributed systems and robotics</b>
Co-Chairs	Christophe Logé (France) & David Durand (France)
Room / Time	<b>31.1.05 – ROOM 8</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-001899 : Mutual Localization of Mobile Robotic Platforms Using Kalman Filtering</b> Vincent Zalzal, Paul Cohen
<b>3:20 PM</b>	<b>PF-008168 : Ubiquitous Function Services Based Control for Robots : with Ambient Intelligence</b> Bong Keun Kim
<b>3:40 PM</b>	<b>PF-002208 : Qualitative Modelling of Manufacturing Machinery</b> Georgia Garani, George Adam
<b>4:00 PM</b>	<b>PF-010782 : Service Oriented Architecture for Context Perception Based on : Heterogeneous Sensors Network</b> Vincent Ricquebourg, David Menga, Laurent Delahoche, Bruno Marhic, David Durand, Christophe Logé
<b>4:20 PM</b>	<b>PF-014141 : Schematic Architecture: Reference Architecture / Frameworks / Particular Models for the Shop Floor Environment</b> Jose Acosta, Francisco Sastrón
<b>4:40 PM</b>	<b>PF-014249 : The Examples of Implementation of Two Specialized Case : Tools as Extensions of a General Framework</b> Jindrich Cernohorsky, Jiri Koziorek, Gustav Hrudka

**THURSDAY 9**

TPC1 – 6 Co-Chairs Room / Time	<b>Nonlinear &amp; optimal control - I</b> Pierre Sicard (Canada) <b>31.1.07 – ROOM 9</b>	3:00 PM to 5:00PM
3:00 PM	<b>PF-006173 : Adaptive nonlinear backstepping control of SEDCM under velocity constraint</b> Sun Im, Byeong-Seok Lee	
3:20 PM	<b>PF-010707 : Nonlinear Target Impedance Design and Its Use in Robot Compliant Motion Control with Time Delay Estimation</b> Pyung Hun Chang, Maolin Jin	
3:40 PM	<b>PF-009059 : Stabilization of Rotary Inverted Pendulum by Gain-scheduling of Weight and <math>H_{\infty}</math> Loop Shaping Controller</b> Kazuhiro Yubai, Kazunori Okuhara, Junji Hirai	
4:00 PM	<b>PF-003522 : Decentralized H-infinity Control of Maglev Systems</b> Jong-Moon Kim, Sang-Hyuk Lee, Young-Kiu Choi	
4:20 PM	<b>PF-002440 : On a Synthesis of Multivariable PID Controllers for a Class of Linear Systems</b> Nagato Ohse, Yoshitaka Matsuda, Koki Tanaka	
4:40 PM	<b>PF-015008 : Control problems related to tumor angiogenesis</b> Andrzej Swierniak, Alberto Gandolfi, Alberto d'Onofrio	

**THURSDAY 9**

TPC1 – 12 Co-Chairs Room / Time	<b>Control of mobile systems</b> John Y. Hung (USA) <b>33.1.09 – ROOM 10</b>	3:00 PM to 5:00PM
3:00 PM	<b>PF-012904 : Design and Development of New Controller Suitable to Neighbourhood Electric Vehicle Propulsion Control</b> José Ricardo Soares, Nuno Miguel Cerqueira, Ricardo Pinto de Castro, Hugo Santos Oliveira, Rui Esteves Araujo	
3:20 PM	<b>PF-006106 : An Integrated System for Logic Controller Implementation Using FPGAs</b> Celso F. Silva, Camilo Quintans, Jose M. Lago, Enrique Mandado	
3:40 PM	<b>PF-009792 : Nonlinear modelling and control approach for a turbocharged SI engine</b> Djamel Khiar, Jimmy Lauber, Thierry-Marie Guerra, Thierry Floquet, Yann Chamaillard, Guillaume Colin	
4:00 PM	<b>PF-002968 : Singular perturbation modelling and control of embarked electrical network</b> Lamyia Abdeljalil, Mourad Ait-Ahmed, Mohamed Fouad Benkhoris	
4:20 PM	<b>PF-000226 : Industrial Communication Systems in Technology Control for Public Transport Vehicles</b> Miguel-Angel Domínguez, Perfecto Marino, Francisco Poza, Santiago Otero	
4:40 PM	<b>PF-011479 : Modelling and Control of a Multi-Mass Ultrasonic Motor for Airborne Applications</b> Hermann Wetzel, Norbert Frohleke, Joachim Bocker, Sébastien Ouchouche, Daniel Bezanere, Frédéric Cugnon	

**THURSDAY 9**

<b>TPC6 – 1</b>	<b>Industrial processes</b>
Co-Chairs	Eric Brassard (France) & Giuseppe Buja (Italy)
Room / Time	<b>33.1.10 – ROOM 11</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-001538 : Process Oriented Engineering Using Highly Integrated Adaptive Computer Descriptions</b> Imre J. Rudas, László Horváth
<b>3:20 PM</b>	<b>PF-002879 : Monitoring of timed discrete events systems : Application to manufacturing systems</b> Adib Allahham, Hassane Alla
<b>3:40 PM</b>	<b>PF-009776 : Methodology for Capability Profiling of Manufacturing Equipment</b> Kenji Suzuki, Satoshi Iwatsu, Shinichiro Chino, Tetsuo Ideguchi
<b>4:00 PM</b>	<b>PF-002208 : Qualitative Modelling of Manufacturing Machinery</b> Georgia Garani, George Adam
<b>4:20 PM</b>	<b>PF-010731 : Evaluation of Reconfigurable Manufacturing Systems configurations using tolerance criteria</b> Florent Frizon de Lamotte, Pascal Berret, Jean-Luc Philippe
<b>4:40 PM</b>	<b>PF-010995 : A Proposal to the Supervision of Processes in an Industrial Environment with Heterogeneous Systems</b> Rodrigo B. Souza, Adelardo A.D. Medeiros, João M. Nascimento, Heitor P. Gomes, André L. Maitelli

**THURSDAY 9**

<b>TPC5 – 6</b>	<b>Speech &amp; signal processing - II</b>
Co-Chairs	Mohamed Benjelloun (France) & Carlos de Marziani (Spain)
Room / Time	<b>33.1.11 – ROOM 12</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-009733 : Off-line segmentation of GPS signal tracking using a Bayesian approach</b> Stanislas Bouteille, Serge Reboul, Mohammed Benjelloun
<b>3:20 PM</b>	<b>PF-009326 : Convex Hull in Medical Simulations: A New Hybrid Approach</b> Fadi Yaacoub, Yskandar Hamam, Antoine Abche, Charbel Fares
<b>3:40 PM</b>	<b>PF-009652 : Inter-Symbol Interference Reduction on Macro-Sequences Generated from Complementary Set of Sequences</b> Carlos De Marziani, Jesus Ureña, Alvaro Hernández, Manuel Mazo, Juan Jesus Gracia, Ana Jimenez, José Manuel Villadangos, Maria del Carmen Perez, Fernando Alvarez, Alberto Ochoa
<b>4:00 PM</b>	<b>PF-010081 : Windows Processing for Deblocking Filter in H.264/AVC</b> Chung-Ming Chen, Chung-Ho Chen, Jian-Ping Zeng, Wan-Chug Hsu, Chao-Tang Yu
<b>4:20 PM</b>	<b>PF-011649 : Auto-adjustable method for Gaussian width optimization on RBF neural network. Application to face authentication on a mono-chip system</b> Lionel Pierrefeu, Jacques Jay, Cecile Barat
<b>4:40 PM</b>	<b>PF-011789 : Computation of Sar Distributions in a Head Due to a Radiating Dipole Antenna Representing A Hand-Held Mobile Phone</b> Mohammed Bouhorma, Fatiha Elouai, Ahmed Mamouni

**THURSDAY 9**

<b>SS13</b> Co-Chairs Room / Time	<b>Low power electronics and systems on the chip - 1</b> Manus Henry (UK) & Marcian Cirstea (UK) <b>33.1.13 – ROOM 13</b> 3:00 PM to 5:00PM
3:00 PM	<b>PF-004049 : Reusable VHDL Architectures for Induction Motor PWM Vector Control, targeting FPGAs</b> Abdulmagid Aounis, Marcian Cirstea, Silvia Cirstea
3:20 PM	<b>PF-015024 : Limited-Pool Random Carrier-Frequency PWM for Digitally Controlled dc-dc Converters</b> Daniele Trevisan, Paolo Mattavelli, Mauro Zigliotto, Stefano Saggini
3:40 PM	<b>PF-013234 : Statistical Power Estimation for IP-Based Design</b> Yaseer A. Durrani, Teresa Riesgo
4:00 PM	<b>PF-010103 : Reconfigurable OPB Coprocessors for a Microblaze Self-Reconfigurable SOC Mapped on Spartan-3 FPGAs</b> Enrique Canto, Mariano Lopez, Francesc Fons
4:20 PM	<b>PF-007838 : FPGA-based Implementation of an Ultrasonic Beacon for a Local Positioning System</b> Ana Jiménez, Álvaro Hernández, Jesús Ureña, Marta Alonso, M. Carmen Pérez, Carlos De Marziani, Manuel Mazo, J. Manuel Villadangos, Juan Jesús García, Fernando Álvarez
4:40 PM	<b>PF-004081 : Holistic Modelling of a Fuel Cell Power System and FPGA Controller using Handel-C</b> Kresimir Petrinec, Marcian Cirstea

**THURSDAY 9**

<b>TPC7 – 7</b> Co-Chairs Room / Time	<b>Positioning</b> Hisato Kobayashi (Japan) & Tarek Tutunji (Jordania) <b>33.1.14 – ROOM 14</b> 3:00 PM to 5:00PM
3:00 PM	<b>PF-000352 : An Inertially Stabilised Vehicle Camera System - Hardware, Algorithms, Test Drives</b> Wolfgang Günther, Philipp Wagner, Heinz Ulbrich
3:20 PM	<b>PF-008907 : Accurate Calibration of a Robotic Positioning System Using the Evolutionary Search</b> Yau-Zen Chang, Jung-Fu Hou, Shih-Tseng Lee
3:40 PM	<b>PF-000558 : Magnetic Part Design of Pipe-Surface Inspection Robot</b> Toshihiro Yukawa
4:00 PM	<b>PF-005835 : Mechatronic Contouring System for Unconventional Sheet Metal Forming Processes</b> Radu E. Breaz, Valentin Oleksik, Octavian C. Bologa
4:20 PM	<b>PF-008818 : Trajectory Planning of Biped Robot Using Linear Pendulum Mode for Double Support Phase</b> Maki Shibuya, Tomoyuki Suzuki, Kouhei Ohnishi
4:40 PM	<b>PF-005363 : Architecture of data fusion for the dynamic follow-up of vehicles: SAACAM project</b> Sonia Izri, Arnaud Clérentin, Eric Brassart, Laurent Delahoche, Cyril Drocourt

**SS05 – 1**

Co-Chairs

Room / Time

**Human adaptive and friendly mechatronics - 1**

Maki K. Habib (Japan) & Shunji Moromugi (Japan)

**33.1.15 – ROOM 15**

3:00 PM to 5:00PM

**3:00 PM PF-015857 : Mechatronics Engineering Mechatronics Engineering: The Evolution, The Needs and the Challenges**

Maki K. Habib

**3:20 PM PF-012734 : Analysis of intermittent control systems by human operations**

Masami Iwase, Shoshiro Hatakeyama, Katsuhisa Furuta

**3:40 PM PF-013358 : Human Adaptive Assist Planning for Teleoperation**

Hiroshi Igarashi, Akira Takeya, Fumio Harashima, Masayoshi Kakikura

**4:00 PM PF-013366 : Skill Analysis in Human Tele-operation Using Dynamic Image**

Kazumasa Saida, Satoshi Suzuki, Yorito Maeda, Kouiti Hidaka

**4:20 PM PF-007064 : Development of an effective training machine using muscle activity information**

Shunji Moromugi, Seok-Hwan Kim, Sung J. Yoon, Nobuou Matsuzaka, Takakazu Ishimatsu, Murray J. Lawn

**4:40 PM**

**FRIDAY 10**

<b>TPC3-19</b> Co-Chairs Room / Time	<b>Resonant converter</b> Praveen Jain (Canada) & Guy Clerc (France) <b>30.-1.4 – ROOM 1</b>	8:00 AM to 10:00 AM
8:00 AM	<b>PF-015881 : A Wide Bandwidth Resonant-based Digitally Controlled 48V Voltage Regulator Module</b> Mohamed Youssef, Praveen Jain	
8:20 AM	<b>PF-012955 : A new resonant gate drive circuit utilizing leakage inductance of transformer</b> Kai Xu, Yan-Fei Liu, P. C. Sen	
8:40 AM	<b>PF-000493 : Analysis of Multi-Resonant Current Control Structures and Tuning Methods</b> Amaia Lopez de Heredia, Haizea Gaztañaga, Ion Etxeberria-Otadui, Seddik Bacha, Xavier Guillaud	
9:00 AM	<b>PF-008516 : Indirect Power Factor Correction Method and Corresponding Sensorless Switch-Mode Resonant AC/DC Converter</b> Jevgeni Shklovski, Kuno Janson, Jaan Järvik	
9:20 AM	<b>PF-001630 : Analysis, design and practical evaluation of an input-output linearization controller for the CLL-T dc-dc resonant converter</b> Jorge Luis Sosa Avendaño, Miguel Castilla, Nestor Berbel, Josep M <sup>a</sup> Guerrero Zapata, Luis García de Vicuña	
9:40 AM	<b>PF-004235 : A Novel Buck-Boost Control Technique for Push-Pull Parallel-Resonant Converters</b> Duleepa Thrimawithana, Udaya Madawala, Peter Lunenberg	

**FRIDAY 10**

<b>TPC3-20</b> Co-Chairs Room / Time	<b>AC-AC converter and activer filter</b> Vincent Lanfranchi (France) & Farhat Fnaiech (Tunisia) <b>30.-1.2 – ROOM 2</b>	8:00 AM to 10:00 AM
8:00 AM	<b>PF-012149 : Realization of High Efficiency AC link Converter System based on AC/AC Direct Conversion Techniques with RB-IGBT</b> Junichi Itoh, Takashi Iida, Akihiro Odaka	
8:20 AM	<b>PF-004189 : Single-Phase AC-AC Converter Operating as a Voltage Dynamic Restorer (DVR)</b> Jorge Pérez, Víctor Cárdenas, Luis Morán, Ciro Núñez	
8:40 AM	<b>PF-000485 : Robust control of a Shunt Active Power Filter for the medium voltage range based on a three-level Neutral Point Clamped converter</b> Alejandro Munduate, Gabriel Garcerá, Emilio Figueres	
9:00 AM	<b>PF-013218 : IP Controlled Three-Phase Shunt Active Power Filter for Power Improvement Quality</b> Abdelmadjid Chaoui, Jean-Paul Gaubert, Fateh Krim, Laurent Rambault	
9:20 AM	<b>PF-004812 : A Simplified Control Algorithm for Shunt Active Power Filter Without Load and Filter Current Measurement</b> Engin Ozdemir, Mehmet Ucar, Metin Metin, Murat Kale	
9:40 AM	<b>PF-006181 : A Method to Reduce Power Consumption of Active-Clamped Flyback Converter at No-Load Condition</b> Jong Hyun Kim, Myung Hyo Ryu, Byung Duk Min, Eui Ho Song	

**FRIDAY 10**

<b>TPC3-21</b> Co-Chairs Room / Time	<b>Implementation</b> Lotfi Baghli (France) & Oscar Lopez (Spain) <b>30.-1.1 – ROOM 3</b>	8:00 AM to 10:00 AM
8:00 AM	<b>PF-004146 : Design and Implementation of an Analog Constant Power Load for Studying Cascaded Converters</b> Amir Rahimi, Alireza Khaligh, Ali Emadi	
8:20 AM	<b>PF-008117 : Design and Implementation of a Microcontroller-Based High Power Factor Electronic Ballast to Supply Metal Halide Lamps</b> Marco A. Dalla Costa, Daniel Alonso-Alvarez, J. Marcos Alonso, Jorge García, Jesús Cardesín	
8:40 AM	<b>PF-001074 : Design, Implementation and Characterisation of a Contactless Power Transfer System for Rotating Applications</b> B. A. Potter, S. A. Shirsvär	
9:00 AM	<b>PF-001847 : Real-Time implementation of a SPILL for FACTS.</b> Francisco Freijedo, Jesus Doval-Gandoy, Oscar Lopez, David Piñeiro, Carlos Martínez-Péñalver, Andres Nogueiras	
9:20 AM	<b>PF-006785 : Design and Implementation of Fully Digital Controller for Non-Isolated-Point-of-Load Converter with High Current Slew Rate</b> Ko-Yen Lee, Chia-An Yeh, Yen-Shin Lai	
9:40 AM	<b>PF-007803 : Autonomous Power Generating System with Multi-Level Converters</b> Lech Grzesiak, Jacek Tomaszik	

**FRIDAY 10**

<b>TPC2-7</b> Co-Chairs Room / Time	<b>Identification techniques</b> Antonino C. Di Gerlando (Italy) & Ilhem Slama-Belkhodja (Tunisia) <b>30.-1.3 – ROOM 4</b>	8:00 AM to 10:00 AM
8:00 AM	<b>PF-003241 : On-Line Identification of Induction Motors using Discrete Models for Sinusoidal Signals</b> Alcindo do Prado Jr, Antonio H. de Sousa, Sandro Mauro Ferrari	
8:20 AM	<b>PF-003247 : A Novel Method to Estimate the Rotor Resistance of the Induction Motor Using Support Vector Machines</b> Sergio Villazana, Antonino Caralli, César Seijas, Carlos Villanueva	
8:40 AM	<b>PF-013773 : Dealing with ill Conditioning in Recursive Parameter Estimation for a Synchronous Generator</b> Carlos E. Niño, Miguel Velez-Reyes	
9:00 AM	<b>PF-002963 : Electric drives estimation and denoising schemes based on wavelet transform</b> Damian Giacouris, John W Finch	
9:20 AM	<b>PF-002372 : Identification of Synchronous Machine Parameters Using Hysteresis Based Current Controller</b> Wissem Naouar, Eric Monmasson, Ilhem Slama-Belkhodja	
9:40 AM	<b>PF-010723 : Comparison of measurement methods for the induction machine frequential modelling</b> Mehdi Belhaj, Patrick Guérin, El Hadi Zaïm	

**FRIDAY 10**

<b>TPC2-13</b> Co-Chairs Room / Time	<b>Doubly-fed and special induction motor drives</b> Maria Valla (Argentina) & Emil Levi (UK) <b>31.1.71 – ROOM 5</b>	8:00 AM to 10:00 AM
8:00 AM	<b>PF-007471 : PWM Inverters and Double Star Asynchronous Machine drive – Sliding mode solution.</b> Nadia Mokhtari-Madani, Christophe Millet, Mohamed-Fouad Benkhoris, René Le Doeuff	
8:20 AM	<b>PF-001216 : Field Oriented Current Vector Control of Double-Fed Induction Wind Generator</b> Istvan Schmidt, Karoly Veszpremi	
8:40 AM	<b>PF-012289 : A Fault Tolerant Operating System in Doubly Fed Induction Machine Under Inverter Short-Circuit Faults</b> Sejir Khojet El Khil, Ilhem Slama-Belkhodja, Maria Pietrzak-David, Bernard de Fornel	
9:00 AM	<b>PF-000019 : Independent Control of Two Five-Phase Induction Machines Connected in Parallel to a Single Inverter Supply</b> Martin Jones, Emil Levi, Slobodan N. Vukosavic	
9:20 AM	<b>PF-015547 : A Two-phase Induction Motor Back-to-back Drive</b> Carlo Cecati, Antonio Dell'Aquila, Agostino Lecci, Marco Liserre	
9:40 AM	<b>PF-003692 : Stability Analysis of a Brushless Doubly-Fed Machine under Closed Loop Scalar Current Control</b> Izaskun Sarasola, Javier Poza, Estanis Oyarbide, Miguel Angel Rodriguez	

**FRIDAY 10**

<b>TPC6-2</b> Co-Chairs Room / Time	<b>Communication protocols</b> Imre Rudas (Hungary) & Alessandro Souza (Brazil) <b>31.1.01 – ROOM 6</b>	8:00 AM to 10:00 AM
8:00 AM	<b>PF-001228 : A Novel Time Independent Asynchronous Communication Protocol &amp; Its Applications</b> Pj Radcliffe, Xinghuo Yu	
8:20 AM	<b>PF-003340 : Proposal and Evaluation of Outdoor Localisation based on IEEE 802.11</b> Salvatore Cavalieri	
8:40 AM	<b>PF-003816 : Designing and Implementing Real-Time and Dependable, Embedded Control Applications Using FlexCAN</b> Juan R. Pimentel	
9:00 AM	<b>PF-009482 : Investigation on the application of a time-triggered protocol aboard trains</b> Manuele Bertoluzzo, Giuseppe Buja	
9:20 AM	<b>PF-011886 : An emulator to develop the Wire Train Bus protocol stack</b> Hibai Unzueta, Jaime Jiménez, José L. Martín, Jon Andreu, Carlos Cuadrado	
9:40 AM	<b>PF-013663 : Enforcing Dependability and Timeliness in Controller Area Networks</b> José Rufino, Carlos Almeida, Paulo Veríssimo, Guilherme Arroz	

**FRIDAY 10**

<b>TPC4-6</b> Co-Chairs Room / Time	<b>Network sensors</b> Mark Moulin (Israel) & Maria-Gabriella Di Benedetto (Italy) <b>31.1.03 – ROOM 7</b> 8:00 AM to 10:00 AM
8:00 AM	<b>PF-001108 : A Formal Verification Analysis of a Bayesian Inference-Based Sensors and Actuators Control System</b> Mark Moulin
8:20 AM	<b>PF-001996 : SmartGec: A multisensor System for network monitoring in Civil Engineering</b> Rémy Maurice, Eric Campo, Daniel Esteve, Delphine Bouchet
8:40 AM	<b>PF-006386 : Acquisition of Slip Phenomenon between Developed Distributed-Type Force Sensor and the Contacted Object</b> Akihito Ito, Nobutaka Tsujiiuchi, Takayuki Koizumi, Hiroko Oshima, Yoshiro Nojiri, Yotaro Tsuchiya, Naomichi Hirama, Shiro Kurogi
9:00 AM	<b>PF-006955 : A GPS/INS Integration System with New Orientation Measurement Scheme for Land Vehicle Application</b> Ho Quoc Phuong Nguyen, Hee-Jun Kang, Young-Soo Suh, Young-Shick Ro, Kyu-Chan Lee
9:20 AM	<b>PF-008982 : Probability Field Localization for Wireless Sensor Network</b> Hao Guo, Kay Soon Low, Meng Joo Er
9:40 AM	<b>PF-013579 : Time-varying interference spectral analysis for Cognitive UWB networks</b> Massimo Francone, Daniele Domenicali, Maria-Gabriella Di Benedetto

**FRIDAY 10**

<b>SS01-3</b> Co-Chairs Room / Time	<b>Renewable energy sources - 3</b> Corinne Alonso (France) & Giovanni Spagnuolo (Italy) <b>31.1.05 – ROOM 8</b> 8:00 AM to 10:00 AM
8:00 AM	<b>PF-003506 : ANN Modeling of Nonlinear Subsystem of a PEMFC Stack for Dynamic and Steady State Operation</b> Xin Kong, Wenjie Yeau, Ashwin M Khambadkone
8:20 AM	<b>PF-003646 : Passive Fuel Delivery in Direct Methanol Fuel Cell by Surface Tension Driving Effect</b> Yuming Yang, Yung C. Liang
8:40 AM	<b>PF-006114 : Power Transfer Analysis in a Utility-Interconnected Fuel Cell Distributed Generator</b> Mamadou Doumbia, Kodjo Agbossou, Michel Dostie
9:00 AM	<b>PF-009431 : Dual Response Surface Approach for the Analysis of a Fuel Cell Durability Test</b> Bouchra Wahdame, Denis Candusso, Xavier Francois, Fabien Harel, Marie-Cécile Pera, Daniel Hissel, Jean-Marie Kauffmann
9:20 AM	<b>PF-010235 : Analysis and design of Power R Gyrotors for Voltage Regulation</b> Angel Cid-Pastor, Luis Martinez-Salamero, Corinne Alonso, Bruno Estibals, Lionel Seguier, Guy Schweitz
9:40 AM	<b>PF-011274 : PEM Fuel Cells Control by means of the Perturb and Observe Technique</b> Alessandro Giustiniani, Giovanni Petrone, Cesare Pianese, Marco Sorrentino, Giovanni Spagnuolo, Massimo Vitelli

**FRIDAY 10**

<b>SS09-1</b>	<b>Self-optimizing systems and advanced control - 1</b>
Co-Chairs	Joachim Boecker (Germany) & Ralph Kennel (Germany)
Room / Time	<b>31.1.07 – ROOM 9</b> 8:00 AM to 10:00 AM
<b>8:00 AM</b>	<b>PF-013927 : Self-Optimization as a Framework for Advanced Control Systems</b> Joachim Böcker, Bernd Schulz, Tobias Knoke, Norbert Fröhleke
<b>8:20 AM</b>	<b>PF-009687 : Energy Management for an Onboard Storage System Based on Multiobjective Optimization</b> Tobias Knoke, Christoph Romaus, Joachim Böcker, Alessandro Dell'Aere, Katrin Witting
<b>8:40 AM</b>	<b>PF-012424 : Iterative Learning and Self-Optimization Techniques for the Innovative Railcab-System</b> Ansgar Trächtler, Eckehard Münch, Henner Vöcking
<b>9:00 AM</b>	<b>PF-015393 : Robust Tracking for Time-Varying Uncertain Systems with Application to 4WS Vehicles</b> Michael Skarpetis, Fotis Koumboulis, Achilleas Ntallis
<b>9:20 AM</b>	<b>PF-011924 : Distributed Bayesian Decision-Making for Urban Traffic Control</b> Vaclav Smidl, Jan Prikryl
<b>9:40 AM</b>	<b>PF-005916 : Drive Train Control for Wind Energy Converter Based on Stochastic Dynamic Optimization</b> Constantinos Sourkounis, Bingchang Ni

**FRIDAY 10**

<b>SS15-1</b>	<b>Diagnostics and reliability in electrical systems</b>
Co-Chairs	Fiorenzo Filippetti (Italy) & Hamed Yahoui (France)
Room / Time	<b>33.1.09 – ROOM 10</b> 8:00 AM to 10:00 AM
<b>8:00 AM</b>	<b>PF-003905 : Thorough Understanding And Experimental Validation Of Current Sideband Components In Induction Machines Rotor Monitoring</b> Alberto Bellini, Carlo Concari, Giovanni Franceschini, Emilio Lorenzani, Carla Tassoni, Andrea Toscani
<b>8:20 AM</b>	<b>PF-005754 : Vibrations, currents and stray flux signals to asses induction motors rotor conditions</b> Alberto Bellini, Carlo Concari, Giovanni Franceschini, Carla Tassoni, Andrea Toscani
<b>8:40 AM</b>	<b>PF-004138 : A New Approach for Inter-Turn Short-Circuit Detection in Six-Phase Induction Motor</b> Clayton Silva, Maurício Corrêa, Cursino Jacobina, Edison da Silva, Antonio Marcus Lima, Rijaniaina Andriamalala, Hubert Razik
<b>9:00 AM</b>	<b>PF-014818 : Electrical signals analysis of an asynchronous motor for bearing faults detection</b> Ali Ibrahim, Mohamed El Badaoui, François Guillet, Widian Youssef
<b>9:20 AM</b>	<b>PF-008508 : Modelling and Detection of Inter-Turn Short Circuits in Stator Windings of Induction Motor</b> Hubert Razik, Mohamed Sahraoui, Adel Ghoggal, Salah Eddine Zouzou, Abdennacer Aboubou
<b>9:40 AM</b>	<b>PF-014095 : Considerations about the modeling and simulation of air-gap eccentricity in induction motors</b> Adel Ghoggal, Abdennace Aboubou, Salah Eddine Zouzou, Mohamed Sahraoui, Hubert Razik

**FRIDAY 10**

<b>TPC1-16</b>	<b>New control architectures</b>
Co-Chairs	J. David Irwin (USA)
Room / Time	<b>33.1.10 – ROOM 11</b>
	8:00 AM to 10:00 AM
8:00 AM	<b>PF-004421 : Switching Line Design for VSC of the Second Order Systems with Conventional and Elastic Constraints</b> Andrzej Bartoszewicz, Justyna Zuk
8:20 AM	<b>PF-006858 : Asymmetric PID controller</b> Algirdas Baskys, Valerijus Zlosnikas
8:40 AM	<b>PF-001864 : Solving The Problem Of Forbidden States By Feedback Control Logical Synthesis</b> Abbas Dideban, Hassane Alla
9:00 AM	<b>PF-008532 : Virtual Laboratory for Modeling Systems: A Sustainable Approach</b> Antoni Grau, Yolanda Bolea
9:20 AM	<b>PF-002972 : A TINI Development Environment for Eclipse</b> Dwight Deugo
9:40 AM	<b>PF-003836 : A new Real-Time Hardware Architecture for Road Line Tracking Using a Particle Filter</b> Jaime Alarcon, Ruben Salvador, Felix Moreno, Pedro Cobos, Ignacio Lopez

**FRIDAY 10**

<b>SS17-1</b>	<b>Distributed generation systems and microgrids - 1</b>
Co-Chairs	Josep M. Guerrero (Spain) & Marco Liserre (Italy)
Room / Time	<b>33.1.11 – ROOM 12</b>
	8:00 AM to 10:00 AM
8:00 AM	<b>PF-007102 : Real-Time Analysis of the Control Structure and Management Functions of a Hybrid Microgrid System</b> Haizea Gaztañaga, Ion Etxeberria-Otadui, Seddik Bacha, Daniel Roye
8:20 AM	<b>PF-010871 : Islanding for Distributed Generation</b> Erik S. Hoff, Lars E. Norum
8:40 AM	<b>PF-015245 : Decentralized Control for Parallel Operation of Distributed Generation Inverters in a Microgrid Using Resistive Output Impedance</b> Josep M. Guerrero, Nestor Berbel, Jose Matas, Luis Garcia de Vicuña, Jaume Miret
9:00 AM	<b>PF-015342 : Autonomous load shedding in a nanogrid using DC bus signalling</b> John Schönberger, Richard Duke, Simon Round
9:20 AM	<b>PF-015962 : DSP/FPGA Control for Variable-Speed Wind Turbines</b> Mariusz Malinowski, Wojciech Kolomyjski, Marian Kazmierkowski, Sebastian Stynski
9:40 AM	<b>PF-011916 : Stability Improvement with A Multi-Functional Power Electronic Converter in Distributed Power Systems</b> Z. Chen, Y. Hu, F. Blaabjerg, J.K. Pedersen

## FRIDAY 10

<b>SS04-1</b>	<b>Mechatronics: the progress, the issues and the challenges - 1</b>
Co-Chairs	Maki K. Habib (Japan) & Keigo Watanabe (Japan)
Room / Time	<b>33.1.13 – ROOM 13</b> 8:00 AM to 10:00 AM
8:00 AM	<b>PF-003322 : Development of Monitoring and Control Precise Riveting System using Wireless Internet</b> Hsiung Cheng Lin
8:20 AM	<b>PF-002623 : Timed Petri Nets Modelling of High-Throughput Screening Process for Fault Study</b> Tao Hong, Mo-Yuen Chow
8:40 AM	<b>PF-007358 : A tool for the collaborative sizing of electrical device : CoSTo</b> Laurent Gerbaud, Imen Ammar, Frédéric Wurtz
9:00 AM	<b>PF-015768 : Electroactive materials : from piezomotors to electroactive morphing</b> Bertrand Nogarede, Carole Henaux, Jean-François Rouchon, Eric Duhayon
9:20 AM	<b>PF-05711 : Design of an actuating system using Inverse bond graph methodology: Application to a tow-links flexible manipulator</b> Abdechafik Derkaoui, Eric Bideaux, Michel Vergé, Serge Scavarda
9:40 AM	

## FRIDAY 10

<b>TPC7-8</b>	<b>Walking and grasping</b>
Co-Chairs	Mohamed Abderrahim (Spain) & Kiyoshi Ohishi (Japan)
Room / Time	<b>33.1.14 – ROOM 14</b> 8:00 AM to 10:00 AM
8:00 AM	<b>PF-002712 : A Bilateral Control Method for Master-Slave Grasping and Manipulation System</b> Koichi Nishimura, Kouhei Ohnishi
8:20 AM	<b>PF-003492 : Grasping Force Control in consideration of Translational and Rotational Slippage by a Flexible Sensor</b> Naoki Saito, Toshiyuki Satoh, Hideharu Okano
8:40 AM	<b>PF-004855 : Collision Avoidance Method of Humanoid Robot Based on Controlling Extended Orbital Energy</b> Naoki Motoi, Kouhei Ohnishi
9:00 AM	<b>PF-008338 : A Stable Grasping and Manipulating Control Method Based on Grasp Plane</b> Shoyo Hyodo, Ryogo Kubo, Kouhei Ohnishi
9:20 AM	<b>PF-011967 : Humanoid Walking Robot Control with Natural ZMP References</b> Kemalettin Erbatur, Okan Kurt
9:40 AM	<b>PF-015334 : An Analytical Method to Generate Walking Pattern of Humanoid Robot</b> Yonghwan Oh, Kyung-ho Ahn, Doik Kim, ChangHwan Kim

**SS12-1**

Co-Chairs

Room / Time

**Organic electronics and optoelectronics**

Jean-Pierre Moliton (France) & Sung-Yeol Kwon (Korea)

**33.1.15 – ROOM 15**

8:00 AM to 10:00 AM

- 8:00 AM PF-01604 : Influence of thickness and position of an ultrathin yellow layer on color tuning (including white) of Organic Light Emitting Diodes**  
H. Choukri, A. Fischer, S. Forget, S. Chénais, T. Billeton, M-C. Castex, D. Adès, A. Siove, N. Lemaitre, C. Denis, P. Maisse, B. Geffroy
- 8:20 AM PF-016012 : Solid-state dye-sensitized mesoporous TiO<sub>2</sub> and doped carbazole derivative molecular glasses solar cell**  
Reda Aich, F. Goubard, F. Tran - Van, C. Chevrot, A. Michaleviciute, J. Grazulevicius, B. Ratier
- 8:40 AM PF-015989 : Transparent all organic TFT fabrication by low cost process without clean room**  
Thierry Trigaud, I. El Jazairi, S.Y. Kwon, V. Bernical, J.P. Moliton
- 9:00 AM PF-16098 : Structuration of semiconducting polymer thin films by nanorubbing**  
Gwennaelle Derue, S. Coppée, P. Damman, M. Serin, V. Geskin, P. Leclère, R. Lazzaroni ; S. Gabriele, F. Monteverde
- 9:20 AM PF-3387 : A novel polymeric micropump based on a multilayered Ionic Polymer-Metal Composite**  
Thanh Tung Nguyen, Vinh Khanh Nguyen, Nam Seo Goo,
- 9:40 AM**

**FRIDAY 10**

<b>TPC 3-22</b>	<b>Control of power converters</b>
Co-Chairs	Jose Espinoza (Chile) & Domenico Casadei (Italy)
Room / Time	<b>30-1.4 – ROOM 1</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-001317 : A power sharing series power BJT array with isolated low voltage control for AC power control applications</b> Nihal Kularatna, Paul Cho
<b>11:20 AM</b>	<b>PF-001813 : Multipulse Converter – Topology and Control for Utility Power Conversion</b> Rajib Datta, Haiqing Weng, Kunlun Chen, Allen Ritter, Ravisekhar Raju
<b>11:40 AM</b>	<b>PF-002297 : A Novel STATCOM Based on Cascaded Three-phases Voltage Source Inverter</b> Fu Xiangyun, Wang Jianze, Ji Yanchao
<b>12:00 AM</b>	<b>PF-003467 : Setting the Preheating Process of Electronic Ballasts for Hot-Cathode Fluorescent Lamps, considering the Rh /Rc Ratio</b> Fabio Toshiaki Wakabayashi, Moacyr Aureliano Gomes de Brito, Castellane Silva Ferreira, Carlos Alberto Canesin
<b>12:20 PM</b>	<b>PF-006696 : A Metric for Comparing the EMI Spectra of Power Converters</b> Krishna Mainali, Ramesh Oruganti, Kanakasabai Viswanathan, Swee Peng Ng
<b>12:40 PM</b>	<b>PF-013382 : A Robust PLL Algorithm to Synchronize Static Power Converters with Polluted AC Systems</b> Marcelo Perez, Jose Espinoza, Miguel Torres, Ernesto Araya

**FRIDAY 10**

<b>TPC3-23</b>	<b>Power supply system</b>
Co-Chairs	Ronnie Belmans (Belgium) & Arnaldo Perin (Brazil)
Room / Time	<b>30-1.2– ROOM 2</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-010227 : Analysis and Design of a Contactless Energy Transmission System with Flexible Inductor Positioning for Automated Guided Vehicles</b> Andreas Ecklebe, Andreas Lindemann
<b>11:20 AM</b>	<b>PF-001676 : A Single Phase Uninterruptible Power System with a Gradationally Controlled Voltage Inverter</b> Osamu Mori, Masaki Yamada, Akihiko Iwata, Shinichiro Maruyama, Joji Okada, Yoshihiro Hatakeyama
<b>11:40 AM</b>	<b>PF-003417 : Single Switch LCD Backlight Inverter with a Dimming Control</b> Gang-Youl Jeong
<b>12:00 AM</b>	<b>PF-010944 : Single-Stage Power Factor Correction Switched Power Supply</b> Cícero Postiglione, Arnaldo Perin, Claudinor Nascimento
<b>12:20 PM</b>	<b>PF-002984 : The Feasibility of Small-Scale Residential DC Distribution Systems</b> Kristof Engelen, Erik Leung Shun, Pieter Vermeyen, Ief Pardon, Reinhilde D'huist, Johan Driesen, Ronnie Belmans
<b>12:40 PM</b>	<b>PF-005479 : A Practical Method for Assessment of Harmonic Emission of Electrified Railway</b> Shaofeng Xie, Qunzhan Li

**FRIDAY 10**

<b>TPC3-24</b> Co-Chairs Room / Time	<b>Power converters - 2</b> Frede Blaabjerg (Denmark) & Farhat Fnaiech (Tunisia) <b>30.-1.1– ROOM 3</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-000631 : Control of the line current provided by Dual-Bridge Matrix Converters using a discrete-time sliding mode control approach</b> Mahmoud Hamouda, Farhat Fnaiech, Kamal Al-Haddad
<b>11:20 AM</b>	<b>PF-002233 : A Novel Control of VSC-HVDC for Improving Power Quality of an Industrial Plant</b> Cuiqing Du, Evert Agneholm
<b>11:40 AM</b>	<b>PF-005517 : Describing Function Analysis and Experimental Investigation of a High Power Utility Friendly AC-DC Converter System</b> Ranjan K. Behera, Tata V. Dixit, Shyama P. Das
<b>12:00 AM</b>	<b>PF-007048 : Topological and Modulation Design of a Buck-Boost Three-Level Dual Inverter</b> Feng Gao, Poh Chiang Loh, Don Mahinda Vilathgamuwa, Frede Blaabjerg, Chee Keong Goh, Jian Quan Zhang
<b>12:20 PM</b>	<b>PF-007277 : An AC-DC Converter with Power Compensator Functions for Single-Phase Three-Wire Distribution System</b> Takayuki Fujita, Shoji Iida
<b>12:40 PM</b>	<b>PF-007498 : DC Bus Compensation for a Sinusoidal Voltage Source Inverter with Wave-Shaping Control</b> Matthew Trigg, Hooman Dehboneyi, Chem Nayar

**FRIDAY 10**

<b>TPC2-8</b> Co-Chairs Room / Time	<b>Fault tolerant schemes and diagnostics in motor drives - I</b> Mark Sumner (UK) & Slim Tnani (France) <b>30.-1.3– ROOM 4</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-002461 : Fault Tolerant Field Oriented Control of the Induction Motor for Loss of One Inverter phase</b> Amr Saleh, Mario Pacas, Adel Shaltout
<b>11:20 AM</b>	<b>PF-004448 : Investigation of Static Eccentricity Fault Frequencies using Multiple Sensors in Induction Motors and Effects of Loading</b> Randy Supangat, Jason Grieger, Nesimi Ertugrul, Wen L. Soong, Douglas A. Gray, Colin Hansen
<b>11:40 AM</b>	<b>PF-011932 : Model Based Stator Fault Detection in Induction Motors</b> Cristian H. De Angelo, Guillermo R. Bossio, Santiago J. Giaccone, Guillermo O. García, Jorge A. Solsona, María I. Valla
<b>12:00 AM</b>	<b>PF-001627 : Wavelet based instantaneous power analysis for induction machine fault diagnosis</b> Shahin Hedayati Kia, Augustin Mpanda, Humberto Henao, Gerard-Andre Capolino
<b>12:20 PM</b>	<b>PF-012785 : Torque Ripples Suppression for Six-Phase Induction Motors Under Open Phase Faults</b> Reza Kiani Nezhad, Babak Nahidmobarakeh, Lotfi Baghli, Franck Betin, Gerard-Andre Capolino
<b>12:40 PM</b>	<b>PF-002534 : Induction Machine Broken Bars Fault Detection Using Stray Flux after Supply Disconnection</b> Shahin Hedayati Kia, Humberto Henao, Gerard-Andre Capolino, Claudia Martis

**FRIDAY 10**

<b>TPC2-14</b>	<b>Control techniques in motor drives - II</b>
Co-Chairs	Faz Rahman (Australia) & Seta Bogosyan (USA)
Room / Time	<b>31.1.71 – ROOM 5</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-011088 : Robust Field Weakening Algorithm for Vector-Controlled Induction Machine Traction Drives</b> Zdenek Peroutka, Karel Zeman
<b>11:20 AM</b>	<b>PF-016047 : Adaptive Fuzzy Sliding Mode Control of the Drive System with Flexible Joint</b> Teresa Orłowska-Kowalska, Krzysztof Szabat
<b>11:40 AM</b>	<b>PF-005657 : Nonlinear Adaptive Output Feedback Control of Synchronous Motors with Damping Windings</b> Riccardo Marino, Patrizio Tomei, Cristiano Maria Verrelli
<b>12:00 AM</b>	<b>PD-009377 : Sensorless Control of Induction Motors based on High-Gain Speed Estimation and On-Line Stator Resistance Adaptation</b> Marcello Montanari, Andrea Tilli
<b>12:20 PM</b>	<b>PD-014869 : Dynamic Performance of a Permanent Magnet Brushless DC Motor for UAV Electronic Propulsion Systems</b> Olusegun Solomon, Parviz Famouri
<b>12:40 PM</b>	<b>PF-003956 : Space Vector Modulation with Current Based Dead Time Compensation using Kalman-Filter</b> Johann Zitzelsberger, Wilfried Hofmann

**FRIDAY 10**

<b>TPC6-3</b>	<b>Measurement and control</b>
Co-Chairs	Juan Pimentel (USA) & Manuele Bertoluzzo (Italy)
Room / Time	<b>31.1.01 – ROOM 6</b> 11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-001801 : Determining Transmission Line Parameters from GPS Time-Stamped Data</b> Martin Grobler, Raj Naidoo
<b>11:20 AM</b>	<b>PF-002003 : Development of a Yarn Evenness Measurement and Hairiness Analysis System</b> Vitor H. Carvalho, Paulo J. Cardoso, Michael S. Besley, Rosa M. Vasconcelos, Filomena O. Soares
<b>11:40 AM</b>	<b>PF-002468 : Measurement Error Analysis of Autonomous Decentralized Load Tracking System</b> Tetsuya Masuishi, Koichi Shibata, Yasuyuki Oki, Kinji Mori
<b>12:00 AM</b>	<b>PF-003069 : UML-based Approach for the Re-Engineering of PLC Programs</b> Mohammed Bani Younis, Georg Frey
<b>12:20 PM</b>	<b>PF-005847 : Importance of Data Quality in Virtual Metrology</b> Yi-Ting Huang, Fan-Tien Cheng, Yeh-Tung Chen
<b>12:40 PM</b>	<b>PF-015741 : Description, analysis and test of an autonomous computer aided learning module for digital control</b> Pascal Maussion, André Tricot

**FRIDAY 10**

<b>TPC4-7</b> Co-Chairs Room / Time	<b>Control</b> Jagoba Arias (Spain) <b>31.1.03 – ROOM 7</b>	11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-000353 : Architecture of a Real-Time Wavelet Transform Calculation SoPC Core for Industrial Applications</b> Jagoba Arias, Jesús Lazaro, Armando Astarloa, Jaime Jimenez, Unai Bidarte	
<b>11:20 AM</b>	<b>PF-002035 : A High-Voltage Compatible BCD SoC-ASIC Performing Valley-Switching Control of AC-DC Power Converters Based on PFC and Flyback Cells</b> Rosario Pagano, Winston Langeslag, Kees Schetters, Arjan Strijker, Arjan van Zoest	
<b>11:40 AM</b>	<b>PF-002178 : Backward Motion Control for Articulated Vehicles with Double Trailers Considering Driver's Input</b> Kouki Matsushita, Toshiyuki Murakami	
<b>12:00 AM</b>	<b>PF-003638 : Run-Time Reconfigurable Hardware-Software Architecture for PID Motor Control IP Cores</b> Armando Astarloa, Jesus Lazaro, Unai Bidarte, Jaime Jimenez, Jagoba Arias	
<b>12:20 PM</b>	<b>PF-003751 : Constrained Finite Time Optimal Control of a Micro-Capacitor</b> Leonidas Dritsas, George Nikolakopoulos, Anthony Tzes	
<b>12:40 PM</b>	<b>PF-005134 : An Approach to fusion control of stabilization control and human input in Electric Bicycle</b> Iuchi Ko, Murakami Toshiyuki	

**FRIDAY 10**

<b>SS01-4</b> Co-Chairs Room / Time	<b>Renewable energy sources - 4</b> Francesc Guinjoan (Spain) & Marcello Pucci (Italy) <b>31.1.05 – ROOM 8</b>	11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-001838 : Fuzzy Cognitive Networks + Fuzzy Controller as a self adapting control system for Tracking Maximum Power Point of a PV-Array</b> Yannis Boutalis, Athanassios Karlis, Theodoros Kottas	
<b>11:20 AM</b>	<b>PF-002976 : Inverter Configurations Comparative for Residential PV-Grid Connected Systems</b> Carlos Meza, Juan Jose Negroni, Francesc Guinjoan, Domingo Biel	
<b>11:40 AM</b>	<b>PF-003557 : An LMI Approach to Fuzzy pole cluster for Regulating Wind Energy Conversion System</b> Ahmad Besheer, Hassan Emara, Mohamed Abdel Aziz	
<b>12:00 AM</b>	<b>PF-004499 : A Single-Phase DG Generation Unit with Shunt Active Power Filter Capability by Adaptive Neural Filtering</b> Maurizio Cirrincione, Marcello Pucci, Gianpaolo Vitale	
<b>12:20 PM</b>	<b>PF-012556 : Stand-alone Photovoltaic System using an UPS Inverter and a Microcontrolled Battery Charger based on a Boost Converter with a 3 State-Communication Cell</b> Samuel Araújo, René Bascopé, Fernando Antunes, Edilson Mineiro	
<b>12:40 PM</b>	<b>PF-012815 : Design Issues in Implementing MPPT for Improved Tracking and Dynamic Performance</b> Ashish Pandey, Nivedita Dasgupta, Ashok k. Mukerjee	

**FRIDAY 10**

<b>SS09-2</b> Co-Chairs Room / Time	<b>Self-optimizing systems and advanced control - 2</b> Joachim Boecker (Germany) & Ralph Kennel (Germany) <b>31.1.07 – ROOM 9</b>	11:00 AM to 1:00 PM
11:00 AM	<b>PF-005827 : Funnel-Control for Nonlinear Multi-Mass Flexible Systems</b> Christoph Hackl, Dierk Schröder	
11:20 AM	<b>PF-010022 : A “Two Ahead” Predictive Controller for Active Shunt Power Filters</b> Milijana Odavic, Pericle Zanchetta, Mark Sumner, Claudia Ladisa, Zeljko Jakopovic	
11:40 AM	<b>PF-015105 : Automated Online Design of Robust Position and Speed Digital Controllers For Variable Speed Drives</b> Nnamdi Okaeme, Pericle Zanchetta, Mark Sumner	
12:00 AM	<b>PF-015385 : Robust PID Controller Design with Application to a Flight Actuator</b> Fotis Koumboulis, Michael Skarpetis, Maria Tzamtzi	
12:20 PM	<b>PF-015377 : Recursive Synthesis of Robust Supervisory Controllers for Vector Discrete Event Systems</b> Christoforos Economakos, Fotis Koumboulis, Maria Tzamtzi	
12:40 PM	<b>PF-005223 : A Local Control Strategy for the Control of Discrete-Time Piecewise Affine Systems on Full Dimensional Polytopes</b> Thomas Erhard Hodrus, Florian Wolff, Michael Buchholz, Volker Krebs	

**FRIDAY 10**

<b>SS15-2</b> Co-Chairs Room / Time	<b>Diagnostics and reliability in electrical systems</b> Gerard-Andre Capolino (France) & Guy Clerc (France) <b>33.1.09 – ROOM 10</b>	11:00 AM to 1:00 PM
11:00 AM	<b>PF-010677 : Using co-design techniques to increase the reliability of the Electronic control system for a Multilevel Power Converter</b> Javier de la Caridad Brook Hechavarria, Francisco Javier Rodríguez Sánchez, Pedro Martín Sánchez, Emilio Bueno Peña	
11:20 AM	<b>PF-008281 : Current Based Mechanical Fault Detection in Induction Motors through Maximum Likelihood Estimation</b> Martin Blödt, Marie Chabert, Jérémie Regnier, Jean Faucher	
11:40 AM	<b>PF-014346 : Performance Evaluation of Nonparametric and the MUSIC Methods to Detection of Rotor Cage Faults of Induction Motors</b> Luis Pereira, Denis Fernandes, Daniel Gazzana, Fausto Libano, Sergio Haffner	
12:00 AM	<b>PF-001139 : A Novel Method for Continuous Periodic Interference Suppression in On-Line PD Monitoring of Transformers</b> Yongming Yang, Xinghuo Yu, Caixin Sun, Quandi Wang	
12:20 PM	<b>PF-014257 : Ant Colony Based Algorithm to Identify Alarm Patterns For Prediction of Equipment Failures</b> Ming Luo, Kok Chuan Ng, Dan Hong Zhang, Jing Bing Zhang	
12:40 PM	<b>PF-012823 : Power drive investigation by Spectral analysis of the electromagnetic field emitted by the DC bus</b> Cyrille Gillot, Hamed Yahoui, Gerard Rojat	

**FRIDAY 10**

<b>TPC1-17</b> Co-Chairs Room / Time	<b>Emerging applications of control – I</b> Terry Martin (USA) <b>33.1.10 – ROOM 11</b>	11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-000406 : Novel Power Control Scheme for Stand-Alone Photovoltaic Generation System</b> Rong-Jong Wai, Chung-You Lin, Wen-Hung Wang	
<b>11:20 AM</b>	<b>PF-000415 : Grid-Connected Photovoltaic Generation System with Adaptive Step-Perturbation Method and Active Sun Tracking Scheme</b> Rong-Jong Wai, Wen-Hung Wang, Jun-You Lin	
<b>11:40 AM</b>	<b>PF-004073 : A Microcontroller Based Approach for Nonlinear Characterization of Magnetoencephalographic Data</b> Aldo Bonasera, Maide Bucolo, Riccardo Caponetto, Luigi Fortuna, Francesca Sapuppo, Maria Celvisia Virzi', Maria Gabriella Xibilia	
<b>12:00 AM</b>	<b>PF-008109 : A fault diagnosis approach for hybrid systems</b> Aimed Mokhtari, Marie-Véronique Le Lann, Gilles Hetreux, Jean-Marc Le Lann	
<b>12:20 PM</b>	<b>PF-002887 : Low-order robust power system stabilizer for single-machine systems: an LMI approach</b> Seog-Joo Kim, Soonman Kwon, Young-Hyun Moon, Kook-Hun Kim	
<b>12:40 PM</b>		

**FRIDAY 10**

<b>SS17-2</b> Co-Chairs Room / Time	<b>Distributed generation systems and microgrids - 2</b> Marco Liserre (Italy) & Josep M. Guerrero (Spain) <b>33.1.11 – ROOM 12</b>	11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-014842 : Advanced Grid Synchronization System for Power Converters under Unbalanced and Distorted Operating Conditions</b> Pedro Rodriguez, Alvaro Luna, Mihai Ciobotaru, Remus Teodorescu, Frede Blaabjerg	
<b>11:20 AM</b>	<b>PF-008575 : Comparison of Voltage Harmonic Identification Algorithms for Three-Phase Systems</b> Rául Alcaraz, Emilio Bueno, Marco Liserre, Santiago Cobreses, Francisco J Rodríguez, Francisco Huerta	
<b>11:40 AM</b>	<b>PF-009024 : Independent PQ Control for Distributed Power Generation Systems under Grid Faults</b> Pedro Rodriguez, Adrian Timbus, Remus Teodorescu, Marco Liserre, Frede Blaabjerg	
<b>12:00 AM</b>	<b>PF-009083 : Multilevel transformerless topologies for single-phase grid-connected converters</b> Oscar Lopez, Remus Teodorescu, Jesus Doval-Gandoy	
<b>12:20 PM</b>	<b>PF-009296 : Comparison of Voltage Harmonic Identification Methods for Single-Phase Systems</b> Emilio Bueno, Marco Liserre, Santiago Cobreses, Francisco J. Rodríguez, Carlos Girón	
<b>12:40 PM</b>	<b>PF-010626 : A Grid-Connected Photovoltaic System with Direct Coupled Power Quality Control</b> Sung-Hun Ko, Seong-Ryong Lee, Hooman Dehboneyi, Chem Nayar	

## FRIDAY 10

<b>SS04-2</b> Co-Chairs Room / Time	<b>Mechatronics: the progress, the issues and the challenges - 2</b> Maki K. Habib (Japan) & Michel Cotsaftis (France) <b>33.1.13 – ROOM 13</b>	11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-000418 : Merging Information Technologies With Mechatronics The Autonomous Intelligence Challenge</b> Michel Cotsaftis (France)	
<b>11:20 AM</b>	<b>PF-016101 : Design of Coupled Van del Pol Oscillators for Multi-link Robots</b> Kiyotaka Izumi (Japan), Akihito Tajima, Guang Lei Liu, Keigo Watanabe	
<b>11:40 AM</b>	<b>PF-011355 : Discrete trajectory formation in comparison with the analytical one for smooth movements</b> Ki Tak Ahn, Wan Kyun Chung	
<b>12:00 AM</b>	<b>PF-013617 : Realization of Virtual Slave Model of a Forceps Robot Using Bilateral Control</b> A.M. Harsha S. Abeykoon, Kouhei Ohnishi	
<b>12:20 PM</b>	<b>PF-013595 : Design and development of a Cartesian plotter as a way to teach Mechatronics to Mechanical Engineering students</b> Roberto Strada, Paolo Righettini, Michele Camposaragna, Steven Chatterton, Riccardo Riva, Bruno Zappa	
<b>12:40 PM</b>		

## FRIDAY 10

<b>TPC7-9</b> Co-Chairs Room / Time	<b>Assistance and service robots</b> Doo-Yong Lee (Korea) & Toshiyuki Satoh (Japan) <b>33.1.14 – ROOM 14</b>	11:00 AM to 1:00 PM
<b>11:00 AM</b>	<b>PF-002422 : Novel Step Climbing Control for Power Assisted Wheelchair Based on Driving Mode Switching</b> Hirokazu Seki, Takashi Iijima, Hideaki Minakata, Susumu Tadakuma	
<b>11:20 AM</b>	<b>PF-002404 : Straight and Circular Road Driving Control for Power Assisted Wheelchair Based on Fuzzy Algorithm</b> Hirokazu Seki, Susumu Tadakuma	
<b>11:40 AM</b>	<b>PF-012696 : Attaining Operational Survivability in an Autonomous Unmanned Ground Surveillance Vehicle</b> Boon Kiat Quek, Javier Ibáñez-Guzmán, Khiang Wee Lim	
<b>12:00 AM</b>	<b>PF-013013 : Force Control Test Bench for Underwater Vehicle-Manipulator System Applications</b> Sylvain Lemieux, Julien Beaudry, Michel Blain	
<b>12:20 PM</b>	<b>PF-003133 : A Biomechanical Model to Aid Robot-Assisted Therapy of Upper Limb Impairment</b> Hussein A. Abdullah, Cole Tarry, Gauri S. Mittal, Mohamed Abderrahim	
<b>12:40 PM</b>	<b>PF-005002 : A 6-DOF Parallel Robot for Optical Precise Operation</b> Weibin Rong, Li Ma, Lining Sun, Zheng Li	

**SS12-2**

Co-Chairs

Room / Time

**Organic electronics and optoelectronics**

Roberto Lazzaroni (Italy) &amp; Bernard Geffroy (France)

**33.1.15 – ROOM 15**

11:00 AM to 1:00 PM

- 11:00 AM PF-015075 : Conducting and semiconducting end-capped oligothiophenes for high performance thin film devices in organic electronics**  
Christine Videlot-Ackermann, J. Ackermann, H. Brisset, P. Raynal, F. Moggia, F. Fages, K. Kawamura, N. Yoshimoto
- 11:20 AM PF-16063 : Polythiophene derivatives-based materials for organic field effect transistors and photovoltaic cells**  
J.M. Verilhac, M. Firon, G. Le Blevennec; R. Demadille, J.P. Travers, A. Pron
- 11:40 AM PF-015997 : Modelling of organic device cathode obtained by ion beam assisted deposition**  
M. Chakaroun, B. Ratier, A. Moliton
- 12:00 AM PF-007269 : Pyroelectric Characteristics of 0-3 PbTiO<sub>3</sub>/P(VDF/TrFE) nanocomposites thin films for infrared sensing**  
Sung-Yeol Kwon
- 12:20 PM PF-3278 : Polymer thick film nip width sensor**  
T.V. Papakostas, J. Flick, M. Low
- 12:40 PM PF-01767 : Photonics integrated circuits on plasma-polymer-HMDSO:single-modeTE00-TM00 straight waveguides, S-bends,Y-junctions and Mach Zehnder interferometers**  
T. Begou, B.Bêche, A. Goulet, A. Granier, C. Cardinaud, E. Gaviot, V. Raballand, J.P. Landesman, J. Zyss

**FRIDAY 10**

<b>TPC3-25</b>	<b>Control of power converters - 5</b>
Co-Chairs	Christian Klumpner (UK) & Luc Loron (France)
Room / Time	<b>30.-1.4 – ROOM 1</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-003962 : Microcontroller power mode stabilized power factor correction stage for electronic ballast applied to metal halide lamps</b> Francisco J. Azcondo, F. Javier Díaz, Rosario Casanueva, Christian Brañas
<b>3:20 PM</b>	<b>PF-007307 : Characterizing Impedance Interactions in Switched-Mode Converters Based on Linear Fractional Transformations (LFTs)</b> Ali Altowati
<b>3:40 PM</b>	<b>PF-001063 : Flyback Converter Protection Scheme with a Selective Shutdown Delay Time</b> Hangseok Choi
<b>4:00 PM</b>	<b>PF-001333 : Operation of Distributed Generation in Weak Grids with Local Critical Load</b> Fainan Hassan, Jaap Daalder
<b>4:20 PM</b>	<b>PF-001473 : Numerical Approach for Guaranteeing Stable Design of Practical Matrix Converter Drive Systems</b> Caroline Ruse, Jon Clare, Christian Klumpner
<b>4:40 PM</b>	<b>PF-001784 : A Self Oscillating Voltage Controller for Applications with High Bandwidth</b> Jean-Christophe Olivier, Jean-Claude Le Claire, Luc Loron, Nicolas Ginot

**FRIDAY 10**

<b>TPC3-26</b>	<b>Power converters - 3</b>
Co-Chairs	F. W Fuchs (Germany) & Aldo Boglietti (Italy)
Room / Time	<b>30.-1.2 – ROOM 2</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-009555 : Loss Minimized Pulse Width Modulation of IGBT Current Source Converters</b> M.H. Bierhoff, F.W. Fuchs
<b>3:20 PM</b>	<b>PF-009938 : Stability and Performance Analysis of Regulated Converter Systems</b> Kai Zenger, Ali Altowati, Teuvo Suntio
<b>3:40 PM</b>	<b>PF-010189 : Consequences of Discontinuous Current Consumption on Battery Powered Wireless Terminals</b> Jose Ignacio Garate, Jose Miguel de Diego, Maite Sierra
<b>4:00 PM</b>	<b>PF-010359 : Four-Wire Unidirectional Three-Phase/Level/Switch (VIENNA) Rectifier</b> Jarno Alahuhtala, Heikki Tuusa
<b>4:20 PM</b>	<b>PF-001199 : PLL Structures for Utility Connected Systems under Distorted Utility Conditions</b> Sérgio da Silva, Ermene Coelho
<b>4:40 PM</b>	<b>PF-000695 : Loss of Generation Ratio Analysis for Offshore Wind Farms</b> Menghua Zhao, Zhe Chen, Frede Blaabjerg

**FRIDAY 10**

TPC3-27	<b>Power supply system - 2</b>
Co-Chairs	Mika Sippola (Finland) & Rolf Grunbaum (Sweden)
Room / Time	<b>30.1.1 – ROOM 3</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-011541 : A Resonant Gate Drive Circuit with Reduced MOSFET Switching and Gate Losses</b> Wilson Eberle, Yan-Fei Liu, P.C. Sen
<b>3:20 PM</b>	<b>PF-001162 : SVC for Load Balancing and Maintaining of Power Quality in an Island Grid Feeding a Nickel Smelter</b> Rolf Grünbaum, Pierre Vigneau, Jean-Marie Destombes, Jean-Philippe Hasler, Tomas Gustafsson, Anders Persson
<b>3:40 PM</b>	<b>PF-001603 : Towards the optimum cost of ownership of switched mode power supplies - early stage cost management with life cycle costing</b> Frank Bescherer, Mika Sippola
<b>4:00 PM</b>	<b>PF-003786 : Industrial and lab-scale power module technologies : A review</b> Ludovic Menager, Christian Martin, Bruno Allard, Vincent Bley
<b>4:20 PM</b>	<b>PF-004685 : Simulation of a dual hybrid generator for heavy vehicle application</b> Khadija El Kadri, Alain Berthon
<b>4:40 PM</b>	<b>PF-004553 : The RF power amplifier using current source circuit</b> Juwon Baek, Jong Hyun Kim, Myung Hyo Ryoo, Byung Duk Min, Jong Soo Kim

**FRIDAY 10**

TPC2 – 9	<b>Diagnostics in motor drives - II</b>
Co-Chairs	A.J. Marques Cardoso (Portugal) & Constantinos Sourkounis (Germany)
Room / Time	<b>30.1.3 – ROOM 4</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-001147 : A New Algorithm for the Detection of Faults in Permanent Magnet Machines</b> Paul Barendse, Pragasen Pillay
<b>3:20 PM</b>	<b>PF-002577 : Broken Bearings and Eccentricity Fault Detection for a Permanent Magnet Synchronous Motor</b> Javier A. Rosero, Jordi Cusidó, Antoni García-Espinosa, Juan Antonio Ortega, Luis Romeral
<b>3:40 PM</b>	<b>PF-003953 : Control of a seven-phase axial flux machine designed for fault operation</b> Fabrice Locment, Eric Semail, Xavier Kestelyn, Alain Bouscayrol
<b>4:00 PM</b>	<b>PF-001155 : A New Algorithm for the Detection of Inter-Turn Stator Faults in Doubly-Fed Wind Generators</b> Paul Barendse, Pragasen Pillay
<b>4:20 PM</b>	<b>PF-005967 : Current Sensor Fault Detection by Bilinear Observer for a Doubly Fed Induction Generator</b> Kai Rothenhagen, Friedrich Fuchs
<b>4:40 PM</b>	<b>PF-011266 : Monitoring of Static and Dynamic Air Gap Eccentricity of Inverter Fed Induction Machine Drives</b> Thomas M. Wolbank, Peter E. Macheiner

**FRIDAY 10**

TPC2-15 Co-Chairs Room / Time	<b>Control techniques in motor drives - I</b> Karel Jezernik (Slovenia) & Pericle Zanchetta (UK) <b>31.1.71 – ROOM 5</b> 3:00 PM to 5:00PM
3:00 PM	<b>PF-012025 : Modified Sector Scheme to Overcome Flux Drooping of Direct Torque Controlled IPMSM</b> Priya Verma, B.G. Fernandes
3:20 PM	<b>PF-003359 : Predictive Direct Torque Control of the Doubly Fed Induction Machine with reduced torque and flux ripples at low constant switching frequency</b> Gonzalo Abad, Miguel Angel Rodríguez, Javier Poza
3:40 PM	<b>PF-004308 : A DSP-Based Implementation of a Nonlinear Optimal Predictive Control for Induction Machine</b> Mohamed Amine Fnaiech, Franck Betin, Farhat Fnaiech, Babak Nahidmobarakeh, Gérard-André Capolino
4:00 PM	<b>PF-000325 : Adaptive Backstepping Control for Linear Induction Motor Drive Using FPGA</b> Faa-Jeng Lin, Li-Tao Teng, Chih-Kai Chang
4:20 PM	<b>PF-001384 : Control System Of The Two-Coordinate Multifunctional Servo Drive</b> Vilius Antanas Gelezevicius, Giedrius Blaziunas
4:40 PM	<b>PF-016055 : Adaptive Control of Two-Mass System using Extended Nonlinear Kalman Filter</b> Krzysztof Szabat, Teresa Orlowska-Kowalska

**FRIDAY 10**

TPC6-4 Co-Chairs Room / Time	<b>Formal industrial methods</b> Mihaela Ulieru (Canada) & Pascal Maussion (France) <b>31.1.01 – ROOM 6</b> 3:00 PM to 5:00PM
3:00 PM	<b>PF-005592 : The Improvement on Reinforcement Learning for SCM by the Agent Policy Mapping</b> Ruoying Sun, Gang Zhao, Chen Li, Shoji Tatsumi
3:20 PM	<b>PF-005819 : Comparison of Different ACS Methods and Analysis about Efficiency of Novel ACS Approaches</b> Ruoying Sun, Gang Zhao, Chen Li, Shoji Tatsumi
3:40 PM	<b>PF-009504 : Optimization of an electrical system using Pareto borders of each component. Application to an automotive drive chain</b> Hieu Nguyen Huu, Nicolas Retiere, Frédéric Wurtz
4:00 PM	<b>PF-009679 : Use of Zernike Moments for Grape Detection with Image Processing</b> Rémi Chamelat, Estelle Rosso, Anant Choksiwong, Christophe Rosenberger, Hélène Laurent, Per Bro
4:20 PM	<b>PF-010596 : Cooperative environment for training on SCM</b> Mauro Ferreira Koyama, Francisco Edeneziano Dantas Pereira, Olga Nabuco, Takao Suguiy, Marcus Fabius Henrique Carvalho, Carlos Machado
4:40 PM	<b>PF-012998 : Multi-Agent Scheduling Transient Inter-production States for many Cyclic Productions</b> Olfa Belkahla Driss, Ouajdi Korbaa, Khaled Ghédira, Pascal Yim

**FRIDAY 10**

<b>TPC3-28</b>	<b>Control of power converters - 6</b>
Co-Chairs	Christian Klumpner (USA) & Serge Pierfederici (France)
Room / Time	<b>31.1.03 – ROOM 7</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-007129 : A 24-pulse voltage sourced converter with passive and active harmonic voltage injection</b> F. Javier Chivite-Zabalza, Andrew Forsyth, Peter Cox-Smith, Ismael Araujo-Vargas
<b>3:20 PM</b>	<b>PF-011169 : Analysis of the contact-less power supply for a moving load</b> Cristina Fernandez, Pablo Zumel, Antonio Lazaro, Andres Barrado
<b>3:40 PM</b>	<b>PF-012106 : A New Two-Stage Voltage Source Inverter with Modulated DC-link Voltage and Reduced Switching Losses</b> Christian Klumpner
<b>4:00 PM</b>	<b>PF-000671 : A new modular multilevel conversion structure with passive filter minimization</b> Mario Marchesoni, Matteo Carpaneto, Giuseppe Ferrando, Luis R. Vaccaro
<b>4:20 PM</b>	<b>PF-003913 : A Single-Stage High-Frequency Isolated Three-Phase AC/DC Converter</b> Diego Greff, Ivo Barbi
<b>4:40 PM</b>	<b>PF-012661 : Experimental Characterization and Evaluation of an Scaled-Down TCSC Prototype under Steady State Conditions</b> Edgar Lenymiriko Moreno-Goytia, Enrique Acha

**FRIDAY 10**

<b>SS09-3</b>	<b>Self-optimizing systems and advanced control - 3</b>
Co-Chairs	Joachim Boecker (Germany) & Ralph Kennel (Germany)
Room / Time	<b>31.1.07 – ROOM 9</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-012548 : Observation of Gradients, by Means of Algorithmic Differentiation</b> Eckehard Münch, Ansgar Trächtler
<b>3:20 PM</b>	<b>PF-014966 : Optimal Control for Simultaneous Localisation and Mapping Problems in Indoor Environments with StereoVision</b> Satoshi Takezawa, Tsuguo Ishimoto, Gamini Dissanayake
<b>3:40 PM</b>	<b>PF-008222 : Multi-objective Optimization in Self-optimizing Systems</b> Alessandro Dell'Aere
<b>4:00 PM</b>	<b>PF-013153 : Measuring performance electric power generations using artificial neural networks and Fuzzy Clustering</b> Ali Azadeh, Farid Ghaderi, Mona Anvari, Morteza Saberi
<b>4:20 PM</b>	
<b>4:40 PM</b>	

**FRIDAY 10**

<b>SS15-3</b>	<b>Diagnostics and reliability in electrical systems</b>
Co-Chairs	Alberto Bellini (Italy) & Francois Guillet (France)
Room / Time	<b>31.1.09 – ROOM 10</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-014419 : SE_BNF : An Aide-Diagnosis Expert System of an Iron Core Coil</b> Houda Ben Attia Sethom, Amel Grissa Touzi, Laurent Signac, Gérard Champenois
<b>3:20 PM</b>	<b>PF-001635 : Use of data standardization to improve inverter – induction machine fault detection</b> Olivier Ondel, Emmanuel Boutleux, Guy Clerc
<b>3:40 PM</b>	<b>PF-015261 : Comparative Investigation of Diagnosis Media of Stator Voltage Unbalance and Rotor Broken Bars in Induction Motor</b> Khmais Bacha, Moncef Gossa, Humberto Henao, Gérard-André Capolino
<b>4:00 PM</b>	<b>PF-013536 : A new Approach for Electrical Machine Winding Insulation Monitoring by Means of High Frequency Parametric Modelling</b> Weiping Liu, Emmanuel Schaeffer, Dominique Averty, Luc Loron
<b>4:20 PM</b>	<b>PF-001821 : Time-Frequency Classification Applied to Induction Machine Faults Monitoring</b> Abdesselam Lebaraoud, Guy Clerc
<b>4:40 PM</b>	<b>PF-015539 : The study of double-star synchronous machine in normal mode and the strategy of command in degraded mode</b> Mohammad Ali Shamsi Nejad, Serge Pierfederici, Farid Meibody-Tabar

**FRIDAY 10**

<b>TPC1-18</b>	<b>Emerging applications of control - II</b>
Co-Chairs	J. David Irwin (USA)
Room / Time	<b>33.1.10 – ROOM 11</b> 3:00 PM to 5:00PM
<b>3:00 PM</b>	<b>PF-008362 : Identification of Human Operation under Closed-loop System</b> Yusuke Iwai, Masami Iwase, Ryoichi Ohno, Shoshiro Hatakeyama
<b>3:20 PM</b>	<b>PF-012254 : Stacking approaches for the design of a soft sensor for a Sulfur Recovery Unit</b> Maria Gabriella Xibilia, Luigi Fortuna, Salvatore Graziani, Giuseppe Napoli
<b>3:40 PM</b>	<b>PF-008249 : Human Dexterity Analysis of Machine Operation - Development of the Experimental System</b> Toshiya Tajiri, Masami Iwase, Shoshiro Hatakeyama, Hougyi Li
<b>4:00 PM</b>	<b>PF-003271 : Maintenance Analyses, Control and Supervision System Design of Light Rail ñ An Application in Estonia</b> Argo Rosin, Taavi Mäler, Juhan Laugis
<b>4:20 PM</b>	<b>PF-007943 : Real Time Driving-Aid system for Different Lighting Conditions, on Board a Road Vehicle</b> Miguel Angel García Garrido, Miguel Angel Sotelo Vazquez, Ernesto Martín-Gorostiza, Ignacio Parra
<b>4:40 PM</b>	<b>PF-005541 : Wireless Vehicle Communication for Traffic Control in Urban Areas</b> Ramez M. Daoud, Mohamed A. El-Dakrouhy, Hany M. Elsayed, Hassanein H. Amer, Magdi El-Soudani, Yves Sallez

**FRIDAY 10**

**SS10/14**                   **Ultra wide band (UWB) sensors & RFID technology and applications**  
Co-Chairs                 Zhang Jing Bing (Singapore) & Emil Novakov (France)  
Room / Time              **33.1.11 – ROOM 12**                   3:00 PM to 5:00PM

- 3:00 PM**   **PF-004537 : Discrete Event System Modeling and Dynamic Service Allocation for RFID Networks**  
Oon Peen Gan, Jing Bing Zhang, Tsong Jye Ng, Ming Mao Wong
- 3:20 PM**   **PF-006599 : A UHF (950 MHz) band RFID Reader Compliant with Japanese Radio Law**  
Masao Otani, Hiroshi Harada, Ryuhei Funada
- 3:40 PM**   **PF-015792 : RFID for MRO Work-In-Progress Tracking**  
Tsong Jye Ng, Ming Mao Wong, Jing Bing Zhang, Oon Peen Gan
- 4:00 PM**   **PF-008753 : UWB-IR transceiver for millimeter wave WLAN**  
Nicolas Deparis, Alexandre Boé, Christophe Loyez, Nathalie Rolland, Paul-Alain Rolland
- 4:20 PM**   **PF-013129 : Integrated Ultra-Wideband Transmitter and Receiver for Sensor, Positioning and Identification Network**  
Stanislas Voinot, Emil Novakov, Jean-Michel Fournier, Bruno Challiol
- 4:40 PM**

**FRIDAY 10**

**TPC7-10**                   **Control techniques**  
Co-Chairs                 Suzana Uran (Slovenia) & Alireza Bakhshai (Canada)  
Room / Time              **33.1.14 – ROOM 14**                   3:00 PM to 5:00PM

- 3:00 PM**   **PF-002251 : Tracking Control of an Underactuated Autonomous Surface Vessel Using Switched Feedback**  
Mahmut Reyhanoglu, Ard Bommer
- 3:20 PM**   **PF-002305 : Practical Stability Analysis for Swarm Systems**  
Xue-Bo Chen, Fuchen Pan, Lin Li, Hong Fang
- 3:40 PM**   **PF-003794 : Rapid Control Prototyping of Mechatronic Systems**  
Ales Hace, Ales Polic, Karel Jezernik
- 4:00 PM**   **PF-008052 : High Speed Movement Control making use of Zero Dynamics on Inverted Pendulums**  
Akira Shimada, Naoya Hatakeyama
- 4:20 PM**   **PF-008664 : Large Force Generation Method Exploiting Oscillatory Motion of Manipulator Driven by Van Der Pol Oscillator**  
Jun Kobayashi, Fujio Ohkawa
- 4:40 PM**   **PF-011606 : Damping Control in Magnetic Levitation of Micro Objects**  
Caglar Elbuken, Mir Behrad Khamesee, Mustafa Yavuz

**SS05-2**

Co-Chairs

Room / Time

**Human adaptive and friendly mechatronics - 2**

Maki K. Habib (Japan) & Ju-Jang Lee (Korea)

**33.1.15 – ROOM 15**

3:00 PM to 5:00PM

- 3:00 PM PF-016128 : Approximate Decision Making by Natural Language Commands for Robots**  
Keigo Watanabe, Kiyotaka Izumi, Chandimal Jayawardena
- 3:20 PM PF-015644 : Analysis of Side-approach Transfer Motion for Patients with Spinal Cord Injuries**  
Yoshio Tanimoto, Akihiro Tokuhiro, Hiroyuki Ukida, Hideki Yamamoto, Kuniharu Nanba
- 3:40 PM PF-004367 : Variable Projection Method and Levenberg-Marquardt Algorithm for Neural Network Training**  
Cheoltaek Kim, Taeyong Choi, ad Ju-Jang Lee
- 4:00 PM PF-015946 : Automatic Land-mine Detection System using Adaptive Sensing with Vector GPR**  
Takayuki Matsuno, Toshio Fukuda, Yasuhisa Hasegawa, Yasuhiro Kawai, Shinsuke Sato
- 4:20 PM PF-006718 : Support Apparatuses Based on Technology for Active Life of Elderly**  
Hiroshi Hashimoto, Yasuhiro Ohyama, Naoki Amano, Toshio Matsunaga, Toshinori Tsuboi, Jin She, and Hiroyuki Kobayashi
- 4:40 PM**



## POSTER SESSION

WEDNESDAY 8

### POSTER SESSION 1

<b>Poster Session TPC1-P</b>
<b>Exhibition - Hall 37 level 1 (Second Floor)</b>
<b>Control Systems and Applications</b>

PF-015628	Optimal Discrete-Time Complete Order State Observer Applied to Asynchronous Machine Drive Systems.	Fabiano Salvadori, Mauricio de Campos, Cassiano Rech, Gideon Villar Leandro, Rodrigo Padilha Oliveira, Alexandre Cunha Oliveira
PF-002585	A Nonlinear Reduced Order Observer for Rotor Position Estimation of Sensorless Permanent Magnet Brushless DC Motor Drive	Rajesh Kumar, Narendra Singh, Jogendra Singh, Santhosh Padmanaban
PF-002369	A Design of Indirect Model Reference Adaptive Control for Discrete-Time Multivariable Plant	Wataru Kase, Fumihiko Hatamoto, Yasuhiko Mutoh
PF-000639	Robust Adaptive Control of Non-affine Nonlinear Systems Using Radial Basis Function Neural Networks	Bahram Karimi, Mohamad Bagher Menhaj, Iman Saboori
PF-001009	A Model Reference Adaptive Iterative Learning Control System	Ali Madady
PF-004898	Control of the Boost DC-AC Converter by Energy Shaping	Carolina Albea, Francisco Gordillo, Javier Aracil
PF-001469	An Optimal Iterative Learning Control for Continuous -Time Systems	Mohammad Reza Nasiri
PF-001298	Simulated Annealing Optimized and Neural Networks Self-Tuned PID Voltage Regulator for a Single-Machine Power System	Ahmed Bensenouci, Abdel Ghany Mohamed Abdel Ghany
PF-007706	An Adaptive Optimal Linear Quadratic Regulator Applied to Three Phases PWM AC - DC Converter	S. Zerouali, A. Allag, S. M. Mimoune, M. Y. Ayad, M. Becherif, A. Miraoui, S. Khanniche
PF-000767	Optimal Locations and tuning of Robust Power System Stabilizers using Genetic Algorithms	Mohamed Boudour, Karim Sebaa
PF-000172	&#1614;An Approach Based on Particle Swarm Optimization for Optimal Operation of Distribution Network Considering Distributed Generators	Taher Niknam
PF-000073	Integrated Smart Car Navigation and Voice Control System Design	Jium-Ming Lin, Po-Kuang Chang, Yuan Lo

PF-002135	Development of Real-time Control Test-bed for Unmanned Mobile Vehicles	Wenchuan Cai, Liguo Weng, Ran Zhang, Bin Li, F. Stewart, A Dhaliwal, Y.D. Song
PF-004405	A Preview Controller with Time Based Spline Approximation for Multi-axis Manipulator	Toshihiko Inoue, Masayuki Morimoto, Kouhei Ohnishi
PF-001270	Fast Algorithm for Adaptive Multivariable Generalized Predictive Control	Qi-An Li
PF-003875	A New Model with Feedback Structure for Thermal Process and its Application to Decoupling Control	Ikuo Nanno, Nobutomo Matsunaga, Shigeyasu Kawaji
PF-001066	Real-Time Induction Motor Speed Control with a Feedback Utilizing Power Line Communications and a Motor Feeder Cable in Data Transmission	Antti Kosonen, Markku Jokinen, Jero Ahola, Markku Niemelä
PF-002486	A Sinusoidal VSI Wave-shaping Controller for Non-linear Loads	Matthew Trigg, Hooman Dehboneyi, Chem Nayar
PF-008478	Design of V4DB - Experimental Real-Time Database System	Vaclav Krol, Jan Pokorny
PF-011428	Codesign of CAN Networked Control Systems with Remote Controllers using Jitter Margin	Daniel Perez, Ubirajara Moreno, Carlos Montez
PF-000574	Optimal Robot Path Planning Based on Fuzzy Model of Obstacles	Iman Saboori, Mohamad Bagher Menhaj, Bahram Karimi
PF-006408	Bilateral Control to Achieve Transparent Teleoperation with Perturbation of Static Time Delay	Alireza Alfi, Mohammad Farrokhi
PF-005304	Hybrid Particle Swarm-Based-Simulated Annealing Optimization Techniques	Nasser Sadati
PF-002981	Urban Traffic Intersection Incident Prediction Using Fuzzy Logic	Yaguang Kong

## POSTER SESSION 1

<b>Poster Session TPC4-P</b>
<b>Exhibition - Hall 37 level 1 (Second Floor)</b>

<b>Intelligent sensors</b>		
PF-002990	Monitoring physical device positions using RFID in electrical distribution switchboards	Fabrice Roudet, Smail Tedjini
PF-005088	SENTIO: A Hardware Platform for Rapid Prototyping of Wireless Sensor Networks	Fredrik Linnarsson, Peng Cheng, Bengt Oelmann
PF-010774	Visual Information Assist System Using 3D SOKUIKI Sensor for Blind People -- Concept and System Implementation --	Tatsuro Ueda, Hirohiko Kawata, Tetsuo Tomizawa, Akihisa Ohya, Shin'ich Yuta
PF-012246	Implementing Intelligent Functionality into Embedded System	Isabele Morais Costa, Eloi Cagni Júnior, Felipe César Couto, Leonardo Sávio Guanabara, Diego Domingos, José Alberto Nicolau de Oliveira, Jorge Dantas de Melo, Luiz Affonso Guedes, Adrião Duarte Dória Neto
PF-012335	Modeling of Sensitivity of fabricated Capacitive Pressure Sensor	Sherif Saleh, Amal Zaki, Hamed Elsimary, Shamim Ahamed
<b>System integration</b>		
PF-001724	Design and performance of integrated antennas for wireless intra chip interconnections	Anna Triantafyllou, Philippe Benech, Fabien Ndagiijimana, Joaquin Torres, Alexis Farcy
PF-003908	Simulink/Modelsim Simulable VHDL PID Core for Industrial SoPC Multiaxis Controllers	Jesus Lazaro, Armando Astarloa, Jagoba Arias, Unai Bidarte, Aitzol Zuloaga
PF-005843	Analysis Of A Moving Magnet Miniature Transducer Array Loudspeaker System	Razib Rashedin, Turgut Meydan
PF-006866	Robust Estimation Design of MEMS-Based Integration Inertial Navigation Systems	YungYu Chen
PF-007404	Simulation of particle size measurement with LIBS	Muneaki Wakamatsu, Alexander Andreev, Toshitsugu Ueda
PF-011827	A New Smart Flash Memory Based On the Human Brain Structure by Using Trainable Transistor	Dariush Shahgoshtasbi
<b>Instrumentation Electronics</b>		
PF-001562	A Practical Example to Understand Pipeline A/D Converters Performance Using Software Tools	Camilo Quintans, Maria J. Moure, Enrique Mandado, Manuel A. Castro

PF-004162	Multisensor fibre optic for electrolyte density measurement in lead-acid batteries	Ana María Cao Paz, Jorge Marcos Acevedo, Jesús Doval Gandoy, Alfredo Del Río Vázquez
PF-005312	A 6MHz QCM Sensor with a Miller XCO and its application in liquid media	Loreto Rodriguez-Pardo, Jose Fariña, Claude Gabrielli, Hubert Perrot, Remi Brendel
PF-006076	A New Simulation Tool for the Design of TSM Acoustic Wave Sensors	Loreto Rodriguez-Pardo, Jose Fariña, Claude Gabrielli, Hubert Perrot, Remi Brendel

## POSTER SESSION 1

<b>Poster Session TPC7-P</b>
Exhibition - Hall 37 level 1 (Second Floor)

### Mechatronics & Robotics

<b>Moving robots</b>		
PF-009105	Development of a Person Following Mobile Robot in Complicated Background by Using Distance and Color Information	Keita Itoh, Takashi Kikuchi, Hiroshi Takemura, Hiroshi Mizoguchi
PF-003070	Vibration Influence of Tactile Walking Surface Indicators on the Running of Manual Wheelchairs and Walking Frames	Seiji Mitani, Shoichiro Fujisawa, Osamu Sueda, Tomomi Iwata
PF-013544	Dynamically Reconfigurable Hardware for Autonomous Mini-Robots	Carlos Paiz, Teerapat Chinapirom, Ulf Witkowski, Mario Porrmann
PD-015016	A Mechatronic Platform, The Aldebaran Robotics Humanoid Robot.	David Gouaillier, Pierre Blazevic
PF-010138	Behavioural Affective Modulation of Service Robotic Agents	Carlos Domínguez, Hocine Hassan, Alfons Crespo
PF-001546	Visual based Localization for mobile robots with Support Vector Machine	Jiali Shen, Huosheng Hu
<b>Actuators and robotic applications</b>		
PF-008257	Teleoperated Visual Inspection System for Hull Spot-Blasting	Pedro Javier Navarro Lorente, Juan Suardíaz Muro, Pedro María Alcover Garau, Raúl Borraz Morón, Antonio Mateo Aroca, Andrés Iborra García
PF-003824	Efficient Stepper Motor Torque Ripple Minimization Based on FPGA Hardware Implementation	Dejan Kos, Aljaz Kapun, Milan Curkovic, Karel Jezernik
PF-005584	Current-Controlled Shape Memory Alloy Actuators for Automotive Tumble Flap	Marcello Colli, Carlo Concari, Andrea Toscani, Giovanni Franceschini, Alberto Bellini
PF-005762	Hardware-in-the-Loop Approach for Redundant Brushless Motor Control System	Alessandro Bertacchini, Luca Tamagnini, Matteo Mistrorigo, Marco Morandi, Paolo Pavan
PF-009989	Clinical Evaluation of a Colonoscopy Simulator with Improved Haptics	Sun Young Yi, Hyun Soo Woo, Woojin Ahn, Jae Kyoung Joo, Doo Yong Lee

## POSTER SESSION 2

Poster Session TPC2-P

Exhibition - Hall 37 level 1 (Second Floor)

**Electrical Machines and Drives**

Co-chairs: Piotr Szczupak (Germany) &amp; Mario Javier Duran (Spain)

PF-006807	Investigation of IPMSM's Position Estimation in Very Low Speed Region with DC Link Current Detection	Takayuki Kobayashi, Hisao Kubota, Satoshi Nakagawa
PF-000876	A Novel Sensorless Control Method for IPM Synchronous Machine Drives by Carrier Signal Injection based on Magnetic Saliency	Zhao Feng, Wen Xuhui, Han Li
PF-000848	Rotor-position Sensing System based on one type of Variable-reluctance Resolver	Lizhi Sun, Yongping Lu
PF-002399	A Unified Approach to Back-EMF Detection for Brushless DC Motor Drives without Current and Hall Sensors	Yen-shin Lai, Young-Kai Lin
PF-008206	Sensorless Position Estimation in a Fault Tolerant Surface-Mounted Permanent Magnet AC Motor Drive with Redundancy	Jae Sam An, Nesimi Ertugrul, Wen Liang Soong
PF-003025	Robust control of DC motor velocity through DC-to-DC Buck Power Converter	EI Fadil Hassan, Giri Fouad
PF-015415	On the Use of Precalculated Switching Strategy to Reduce Harmonic Distortion, a Single-Phase Inverter Performance Comparative Study	Kamal Meghriche, Omar Mansouri, Abderrezak Cherifi
PF-003665	New Technique For Maximum Efficiency And Minimum Operating Cost Of Induction Motors Based On Particle Swarm Optmization (Pso)	Radwan Hasan abd Elhamid, Amr Mohamed Abd Elhalim Amin, Refaat Salim Ahmed, Adel Abd Elaziz Abd Elghany
PF-003832	Three-Phase Operation Of Brushless Dc Motor Drive Controlled By A Predictive Algorithm	Gianluca Gatto
PF-008435	Feedback Linearization Control of Inverter Fed Induction Motor - with Sliding Mode Speed and Flux Observers	Dariusz Sobczuk, Mariusz Malinowski
PF-011452	A Speed-Sensorless Direct Torque Control Scheme For Matrix Converter Driven Induction Motor	Krushna.K Mohapatra, Satish Thuta, Mohan Ned
PF-008923	Equivalent Circuit of a Linear Induction Motor with Variable Parameters	Ana Julia Escalada, Sergio Luri, Antonio Gonzalez
PF-014648	Simulation of the Three Phase Induction Machine Including the Effects of Saturation.	Eduardo Souza, Sreeramulu Naidu
PF-010332	Design and Optimisation by zn Complex Function of Magnet Electric Poles in order to do Magnetic Levitation	Clement Lorin, Ignace Rasoanarivo, Adrian Colteu, Alain Mailfert

PF-006483	On-line estimation of permanent magnet flux linkage ripple for PMSM based on a Kalman filter	Xi Xiao, Meng Zhang, Yongdong Li, Min Li
PF-009199	New Approach to Rotor Position Detection and Precision Speed Control of The BLDC Motor	Yuen-Chung Kim, Yong-Ho Yoon, Tae-Won Lee, Byoung-Kuk Lee, Chung-Yuen Won
PF-001686	A simple circuit-oriented model for predicting six-phase induction machine performances	Gerard Aroquiadassou, Humberto Henao, Aldo Boglietti, A. Cavagnino, Gerard Capolino
PF-002941	Direct Torque Control with Space Vector Modulation for Induction Motors Fed by Cascaded Multilevel Inverters	Yi Wang, Heming Li, Xinchun Shi
PF-003034	Discontinuous SVPWM Techniques for Double-Star Induction Motor Drive Control	Khoudir Marouani, Lotfi Baghli, Djafar Hadjouche, Abdelaziz Kheloui, Abderrezak Rezzoug
PF-005525	Study on Methods to Reducing Rail Potential of High-Speed Railway	Mr. Shaofeng Xie
PF-010448	Step by step design procedure of an Independent-Wheeled Small EV	Francisco Perez-Pinal, Marco Gallegos, Ciro Nuñez, U Ricardo Alvarez
PF-000027	Low-loss Electronic Starter for Single-Phase Compressors	Laurent Gonthier, Vincent Adgnot
PF-013781	Gray-Box Modeling of Electric Drives using Recursive Identification and Radial Basis Functions	Angel Aquino-Lugo, Miguel Velez-Reyes
PF-000640	A Novel Control Strategy of Switched Reluctance Motor Contributing to Low Vibrative Noise and Minimal Torque Ripple	Jianbo Sun, Qionghua Zhan, Shuanghong Wang, Kai Xin, Huazhon
PF-014079	Object Orientated Programming of a Squirrel Cage Induction Motor	Bazinbe Sadok, Khaled Jelassi, Gerard Champenois, Slim Tnani
PF-014451	Harmonic and Interharmonic Identification based on Improved Prony's Method	Fabiano Costa, Antonio Cardoso
PF-006815	Performance for Position Control of two Permanent Magnet Synchronous Motors with the Five-leg Inverter	Yuzuke Nozawa, Kazuo Oka, Kouki Matsuse
PF-009393	Cascaded Predictive Control CGPC of an Induction Motor Drive under Constrained Efficiency Optimisation	Barra Kamel, Benmahammed Khier
PF-015598	Analysis Of The Sound Field Emitted By A Doubly Salient Switched Reluctance Motor Using Acoustic Intensity Measurement	Keddar Fatiha, Kaddour Abdelhafid, Maache Amar
PF-003263	Particle Swarm Optimized Direct Torque Control of Induction Motors	Omar El Laban, Hossam Abdel Fattah, Hassan Emara, Ahmed Sakr

## POSTER SESSION 2

<b>Poster Session TPC5-P</b>
Exhibition - Hall 37 level 1 (Second Floor)

**Signal & Image processing**

PF-013315	Documents Image Compression with IDP and Adaptive RLE	Roumen Kountchev, Vladimir Todorov, Mariofanna Milanova, Roumiana Kountcheva
PF-011533	CIRCON: An Alternative 3D Shape Representation for Surface Matching	Carlos Torre-Ferrero, Sandra Robla, Esther G. Sarabia, José Ramón Llata
PF-009865	On-Line Detection of State-of-Charge in Lead Acid Battery Using Both Neural Network and On-Line Identification	Yoshifumi Morita, Sou Yamamoto, Sun Hee Lee, Naoki Mizuno
PF-012769	A New Gradient-Based Mode Selection of Intra Prediction for 4x4 block in H.264/AVC	Kyeong-Yuk Min, Jong-Wha Chong
PF-013889	A novel MRI-SPECT registration scheme using eight similarity measures	Jiann-Der Lee, Chung-Hsien Huang, Yi-Hsin Weng
PF-015687	Sound and video processing in wireless sensor networks	Andrea Kulakov, Georgi Stojanov, Danco Davcev
PF-011371	Timing and carrier acquisition in upstream CATV Channels	Eric Pelet, Eric Salt, Douglas Past
PF-006564	An Analytical Framework for Comparative Analysis of Various Watermarking and Steganographic Techniques	Ahmad K Khan, Habibullah Jamal
PF-007536	Cycle-Accurate Performance Evaluation of Parallel Jpeg2000 on a Multiprocessor System-on-Chip Platform	Simone Smorfa, Mauro Olivieri
PF-008915	An Efficient Skin Illumination Compensation Model for Efficient Face Detection	C N Ravi Kumar, Bindu A
PF-010057	Hardware-Software Co-design of a Fingerprint Image Enhancement Algorithm	Mariano Lopez, Enrique Canto, Mariano Fons
PF-010634	Image segmentation using quantum genetic algorithms	Karima Benatchba, Mouloud Koudil, Yacine Boukir, Nadjib Benkhelat

PF-009784	A color Tracker Employing two-dimensionel color histogram under changeable illumination	Hirofumi Liemura, joo Kooi Tan, Seiji Ishikawa
PF-002215	Improved Canny Edge Detector in Ceramic Tiles Defect Detection	Zeljko Hocenski, Suzana Vasilic, Verica Hocenski
PF-003042	Fractal Rendering of 3D Shapes	Wieslaw Kotarski, Agnieszka Lisowska
PF-003654	3D Object Matching Using Spherical Mapping	Blerim Mustafa, Danco Davcev, Vladimir Trajkovik, Slobodan Kalajdziski
PF-003782	Fingerprint Matching Based on Inter-minutiae Constraint Network	Farid Benhammadi, Hamid Bentou
PF-003818	Application of 1-D Transmultiplexer to Images Transmission	Mariusz Ziolko, Przemyslaw Sypka, Bartosz Ziolko
PF-004758	The DSP Implementation of Moving Object Detecting and Tracking Based on MPEG-4	Pengju Shi, Guangmin Sun, Yan Li
PF-014931	Origin-Destination (O-D) Trip Table Estimation using Traffic Movement Counts from Vehicle Tracking System at Intersection	Sang-Mook Lee, Hojong Baik
PF-009741	MPEG-4SP/ASP decode for DSP-based Multi-Format IP Set Top Box	Fernando Pescador, Matias J. Garrido

## POSTER SESSION 3

Poster Session TPC3-PA
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Exhibition - Hall 37 level 1 (Second Floor)
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### Power Electronics

Co-chairs : Franck Betin (France) & Babak Nahidmobarakeh (France)

PF-006467	Performance Analysis and Improvement of Output Current Controller for Three-Phase Shunt Active Power Filter	XueLiang Wei, Ke Dai, Xin Fang, Pan Geng, Yong Kang
PF-002684	Harmonic Suppression Orthogonal Reactor to Automatically Regulate Voltage in AC Power system	Xiaoxia Wei, Yanchao Ji, Jianze Wang, Yan Dong
PF-003085	Measured Impedance by Distance Relay in Presence of SVC on Transmission Line	Ahad Kazemi, Sadegh Jamali, Hossein Shateri
PF-009873	Steady-State Analysis of the Inductively Coupled Power Transfer System	Wenqi Zhou, Hao Ma
PF-002288	A Novel Fault Detection Scheme for Voltage Fed PWM Inverter	Ok-Sun Yu, Nam-Ju Park, Dong-Seok Hyun
PF-006823	Implementation and Control of Dual Grid Connected Inverter for Wind Energy Conversion System	Ning Zhu, Hui Liang
PF-001651	A Novel High-performance Single-phase PFC Approach Based on One-cycle Control	Yubin Wang, Jiwen Li
PF-004979	Research of Multi-module PWM Rectifier for Feeding System of High-speed Maglev Vehicles	Shuwen Lu, Fei Lin, Xiaojie You, Trillion Q Zheng
PF-000145	Zero-Ripple-Resonant Converters - A New Class in Resonant Power Conversion	Dodi Garinto
PF-001991	Auxiliary Power Supply for the Control IC of a Buck Converter	Ray-Lee Lin, Hung-Ming Chen
PF-006556	A Family of Auxiliary Switch ZVS-PWM DC-DC Converters with Coupled Inductor	Lakshminarasamma N, Ramanarayanan V
PF-003808	A Modified Equivalent Circuit for Common-Mode Current of Single-Phase Full-Bridge Inverters	Kai Zhang, Yunbin Zhou, Yonggao Zhang, Yong Kang
PF-006149	Dynamic Analysis of DC-DC Boost Converter Based on Its Nonlinear Characteristics	Qiang Zhou, Yong Huang, Fan Zeng, Quanshi Chen
PF-009369	Wavelet Based Control Strategy for UPQC Control System Used for Mitigating Voltage Sag	Mehdi Forghani, Saeed Afsharnia
PF-000515	Study on Fuzzy Controller with a Self-adjustable Factor of Active Power Filter	Xu Dianguo, He Na, Wang Wei
PF-009407	Voltage-Mode control of Hybrid Switched Capacitor Converters	Mummadi Veerachary

PF-008486	Analysis and Control of the Output Instantaneous Power for Three Phase PWM Boost Rectifier Under Unbalanced Supply Voltage Conditions	Xinhui Wu, Sanjib K. Panda, Jianxin Xu
PF-001072	Auxiliary Power Supply for the Control IC of a Boost Converter	Ray-Lee Lin, Hung-Ming Chen
PF-001207	Modeling of a parallel hybrid power audio amplifier	Lorenzo Chiesi, Emilio Lorenzani, Giovanni Franceschini, Alberto Bellini

## POSTER SESSION 3

Poster Session TPC6-P
Exhibition - Hall 37 level 1 (Second Floor)

### Industrial Informatics Technology

PF-002558	Product Definition in Mass Customization Adopting Neural Network	Chen Zhaoxun, Wang Liya
PF-002593	A Comparison between Polynomial and Locally Weighted Regression for Fault Detection and Diagnosis of HVAC Equipment	Regunathan Radhakrishnan, Daniel Nikovski, Kadir Peker, Ajay Divakaran
PF-003379	Security Enhancement on VoIP using Chaotic Cryptography	Kwan-Pok Man, Kowk-Wo Wong, Kim Man
PF-004251	A Teaching System Fostering Expertise for the Tuning of Printed Circuit Board Inspection Systems	Hirotaka Wada, Akira Nakajima, Tetsuo Sawaragi, Yukio Horiguchi
PF-004871	FCANN: An Approach to Knowledge Representation From ANN Through Formal Concept Analysis – Application in the Cold Rolling Process	Luis Zárate, Sérgio Dias
PF-009466	Fault-tolerant Actuator System for Electrical Steering of Vehicles	Jesper S. Thomsen, Mogens Blanke
PF-011142	Characterization of waterproofness in ready-to-wear professional garments	Jorge Yáñez, José Fariña, Juan J. Rodríguez-Andina, X. Ramón Nóvoa, Alejandro Marques de Magallanes
PF-011231	Hardware-Software Co-Design in Practice: A Case Study in Image Processing	Ralf Joost, Ralf Salomon
PF-014028	ARM - Adaptive Risk Management Platform for Emergency Response Operations	Mihaela Ulieru, Paul Relf, Merv Matson
PF-014699	Biometric Recognition method in Home Network	Yun-kyung Lee, Hong-il Ju, Hyung-kyu Lee

PF-015083	Accessing WebLabs from Cellular Phones	Javier Garcia-Zubia, Diego Lopez-de-Ipiña, Pablo Orduna
PF-012173	Experience of Design and Prototyping of a Multi-Biometric Early Warning Physical Access Control Security System (PASS) and a Training System (T-PASS)	Svetlana Yanushkevich, Adrian Stoica, Vlad Shmerko

## POSTER SESSION 4

Poster Session TPC3-PB1
Exhibition - Hall 37 level 1 (Second Floor)

### Power Electronics

Co-chairs: Farhat Fnaiech (Tunisia) & Mariusz Malinowski (Poland)

PF-006009	A High Precision Multiple Loop Control Strategy for Three Phase PWM Inverters	Liang Zhou, Xiong Jian, Kai Zhang, Pengfei Shi
PF-009202	A New Control Approach for Active Power Quality Conditioner in Synchronous Rotating Frame	Enxing Yang, Guozhu Chen
PF-004502	Synchronization Analysis on Converters with Distributed Control	Mingyao Ma, Lei Hu, Jiande Wu, Xiangning He, Hao Ma
PF-002402	Development of Dynamic Var Compensator Based on 12-pulse Thyristor Controlled Reactor	Yunbo Long, Han Yu, Zhangpai Cui, Jianhua Zhang
PF-002437	Research on a Practical Approach of Integrated Compensation for Unbalanced Load	Zhangpai Cui, Han Yu, Sheng Li, Yunbo Long, Jianhua Zhang
PF-002445	Approach on detection of reactive and harmonic currents used in single-phase circuit	Han Yu, Zhangpai Cui, Sheng Li, Qihui Liu, Yunbo Long, Jianhua Zhang
PF-001309	Power Redistributor Applied to Distribution Transformers.	Aniel Morais, Ivo Barbi
PF-003601	Pulsed Power Generation Techniques	Duleepa Thrimawithana, Udaya Madawala, Bob Woodhead
PF-010766	A Three-Phase Power Flow Modelization: A Tool for Optimal Location and Control of FACTS Devices in Unbalanced Power Systems	Mahdad Belkacem, Bouktir Tarek, Srairi Kamel
PF-006459	Current or Time Sharing Switches for High Efficiency Photovoltaic Power Systems	Hooman Dehbonei, Sung H. Ko, Seong R. Lee, Lawrence Borle, Chem Nayar
PF-007579	A study on the Specification Decision Method of AF-SMES system considering internal fault condition	ARong Kim, Jae-Ho Kim, Hae-Jong Kim, Seok-Ho Kim, Ki-Chul Seong, Minwon Park, In-Keun Yu
PF-007013	Hydropower Portfolios Management via Markov Decision Process	Chengjun Zhu, Jianzhong Zhou, Wei Wu, Li Mo
PF-012858	An Equivalent Circuit of a Novel Ultrasonic Motor	Guo-Shing Huang, Puu-An Juang, Da-Wei Gu
PF-005207	A Unified SVM Algorithm for Multilevel Converter and Analysis of Zero Sequence Voltage Components	Chenchen Wang, Yongdong Li, Xi Xiao
PF-008885	ZVS considerations for a phase-lock control DC/DC converter with piezoelectric transformer	Shih-Yu Chen, Chern-Lin Chen

PF-010065	Transformer Diagnosis Approach using Frequency Response Analysis Method	Carlos Gonzalez, Jorge Pleite, Rosa A. Salas, Juan Vazquez
PF-012505	A study on the pulse generator for CNT Lamp driving	Myunghyo Ryu, Dongwook Yoo, Jonghyun Kim, Juwon Baek
PF-010499	Artificial Neural Networks as Harmonic Detectors	Abdelaziz Zouidi, Farhat Fnaiech, Kamal AL-Haddad, Salem Rahmani
PF-014036	Fast prototyping of control circuits for Power Electronics, based on FPGA	Cristina Fernández, Pablo Zumel, Marina Sanz, Antonio Lázaro, Celia López, Andrés Barrado

## POSTER SESSION 4

<b>Poster Session TPC3-PB2</b>
<b>Exhibition - Hall 37 level 1 (Second Floor)</b>

### **Power Electronics**

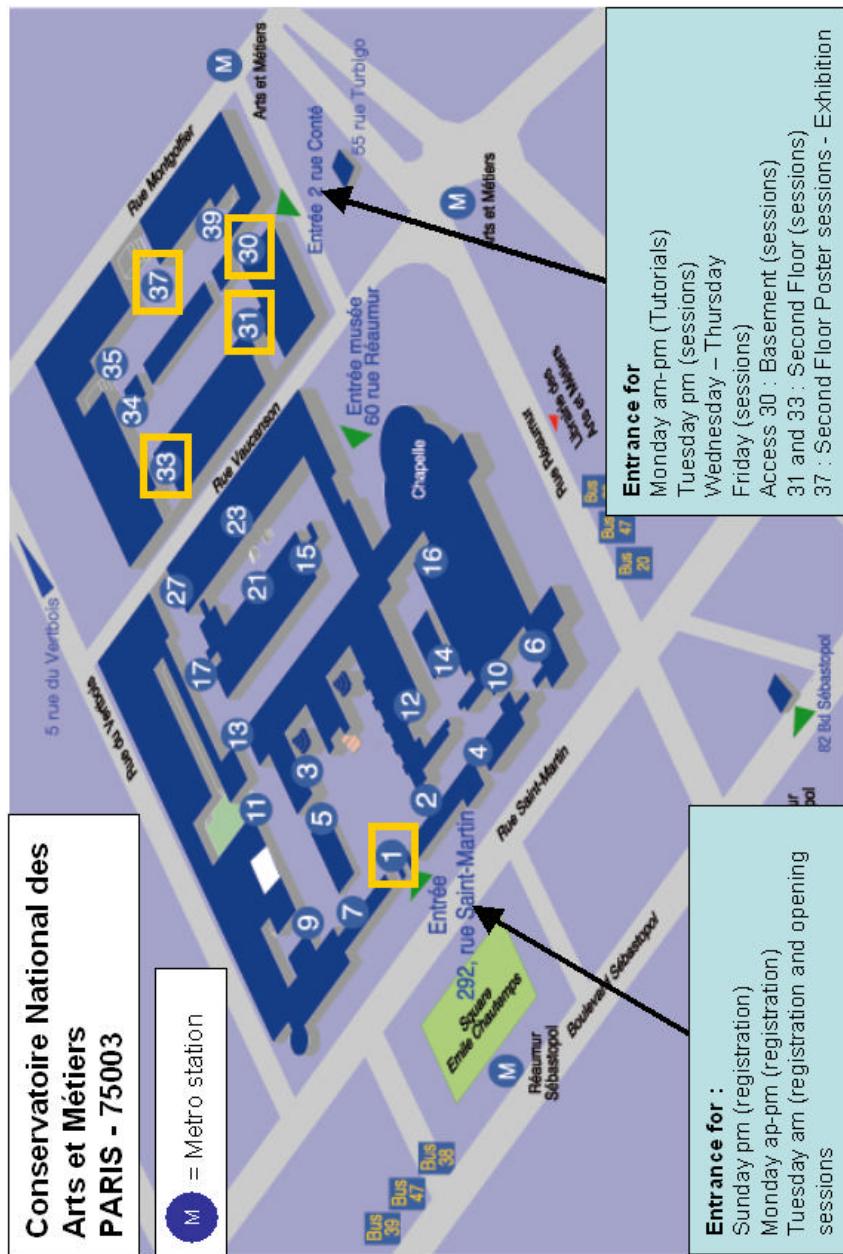
Co-chairs: Carlo Cecati (Italy) & Patrick Wheeler (UK)

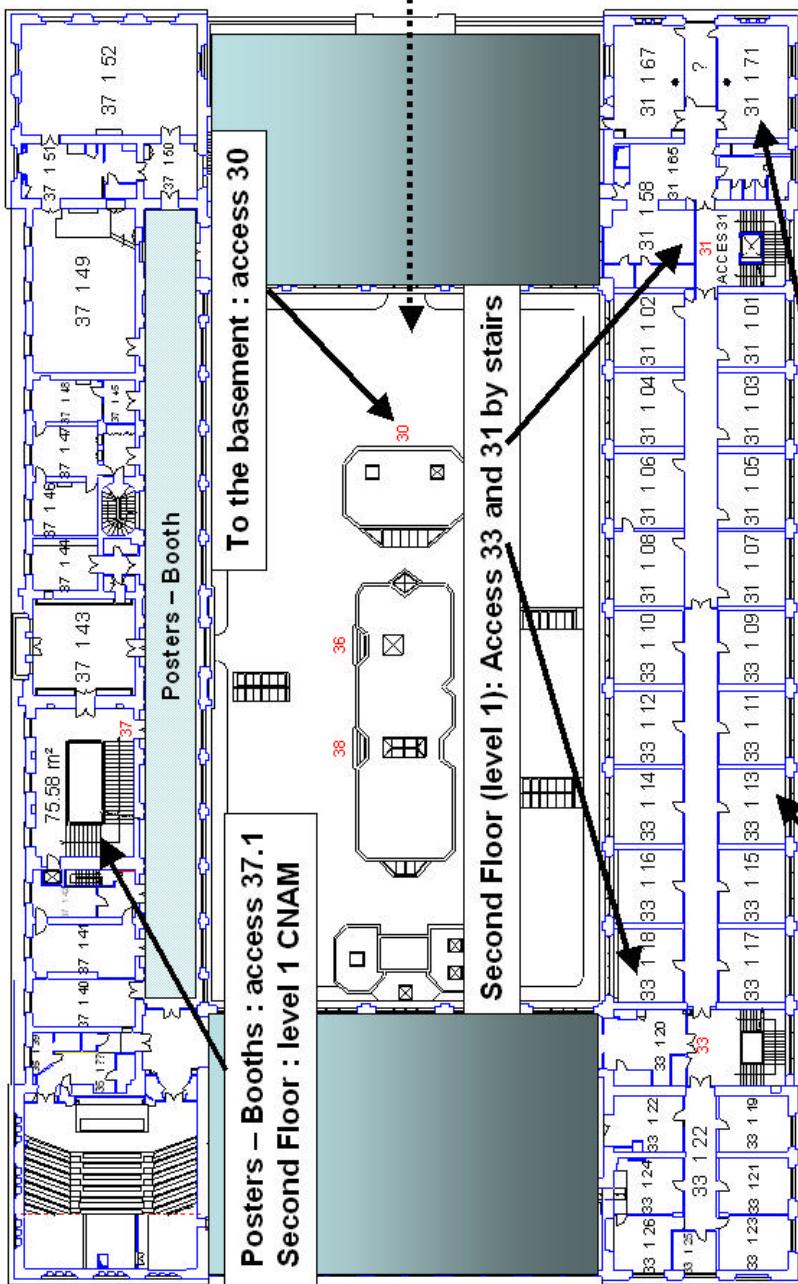
PF-002198	Sags, swells and harmonic solid state compensator	Juan M. Ramirez, José M. Lozano, Julio Rosas
PF-006319	Detection of Sags, Swells, and Interruptions Using the Digital RMS Method and Kalman Filter with Fast Response	Mario González, Víctor Cárdenas, Ricardo Álvarez
PF-002431	ADC architectures for digital controller of high-frequency power converters	Tao Zhou, Jianping Xu, Bruno Francois
PF-009318	Improving The Performances Of Power Converter Working In No-Continuous Duty	Giuseppe Tomasso, Ciro Attaiannese, Vito Nardi
PF-000612	Source-reflected load interactions in a regulated converter	Teuvo Suntio, Mikko Hankaniemi, Matti Karppanen, Ali Altowati, Kai Zenger
PF-002062	Evaluation on basic resonant structures and voltage clamping techniques	Mizhi Zhang, Timothy Little
PF-003232	A Hybrid Capacitor-Clamp Cascade Multilevel Converter	Anees Abu Sineh, Ming-yan Wang, Kai Tian
PF-006688	A Novel Control Strategy for Three-Phase Rectifier with High Power Factor	Hong-Hee Lee, Brovanov Sergey, Phan Van Tung, Tae-Won Chun
PF-012017	A Current Flow Model for m-Level Diode-Clamped Multilevel Converters	Sayed Ali Khajehhossin, Alireza Bakhshai, Praveen K. Jain
PF-000205	A Universal SVM for Multi-leg Inverters	Fan Yue, Patrick W. Wheeler, Jon C. Clare
PF-001568	PWM switch model of Tapped Inductor Converters under hysteretic current mode control	Joung-hu Park, Bo-Hyoung Cho, Tae-Hun Kim
PF-002224	Investigation of Frequency/AC Voltage Control for Inverter Station of VSC-HVDC	Cuiqing Du, Evert Agneholm
PF-000582	Small-signal models for constant-current regulated converters	Teuvo Suntio, Mikko Hankaniemi
PF-012602	A Novel Seven-Level Shunt Active Filter for High-Power Drive Systems	Peng Xiao, Keith Corzine, Ganesh Venayagamoorthy
PF-002194	Design of a Passive Filter to Reduce Common-mode and Differential-mode Voltage Generated by Voltage-Source PWM Inverter	Xu Dianguo, Gao Qiang, Wang Wei

PF-002729	Carrier-Based Signal Injection Method for the Harmonic Suppression in PWM Inverter using Single DC-link Current Sensor	Hyung-Sun Ryu, Ho-Sun Yoo, Jung-Ik Ha
PF-001171	Predictive Control Strategy for ZCS Single Stage Resonant Converter	Maurizio Catucci, Jon Clare, Patrick Wheeler
PF-012572	Cancellation Predictive Control for Three-Phase PWM Rectifiers under Harmonic and Unbalanced Input Conditions	Peng Xiao, Keith Corzine, Ganesh Venayagamoorthy
PF-002291	AC-DC Bidirectional Single-Phase Step-Down Converter with High Power Factor	Edward Fuentealba, Ivo Barbi
PF-012629	Cost Function-Based Predictive Control for Power Converters	Patricio Cortes, Jose Rodriguez, Rene Vargas, Ulrich Ammann

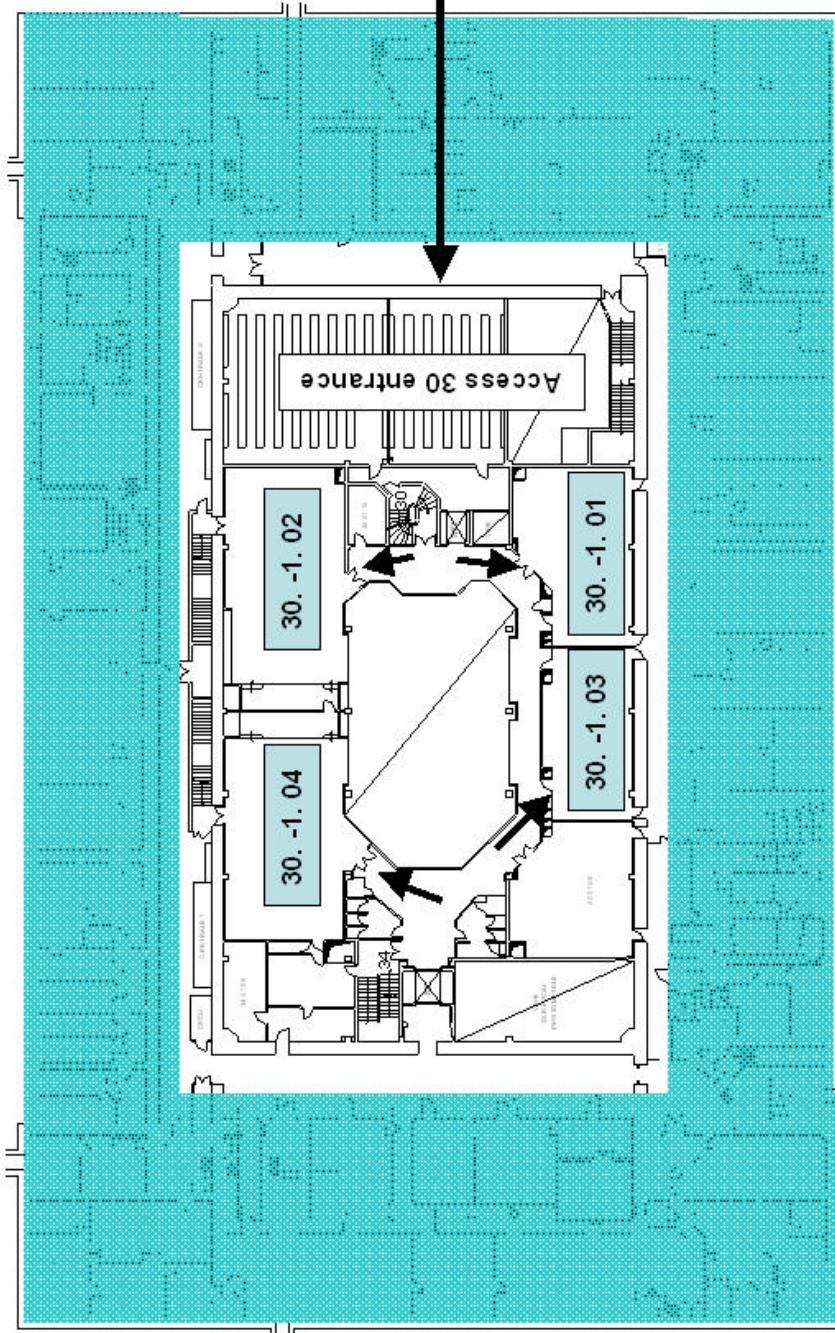


## ROOM LOCATION & MAPS



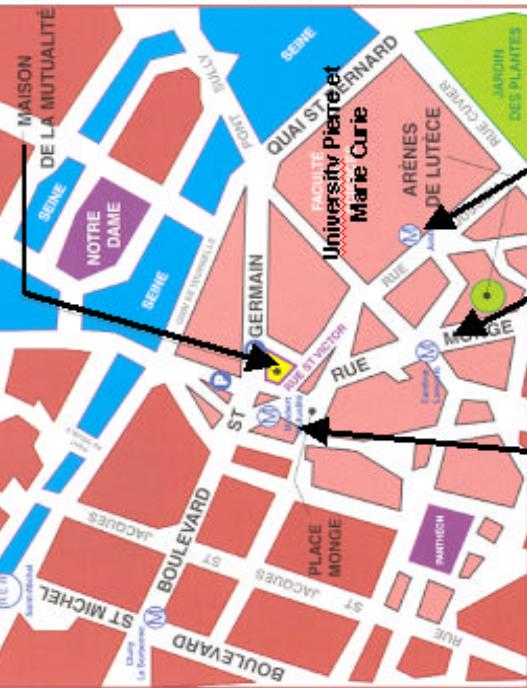


Session entrance : 2 RUE CONTE



Basement : Access to 30.-1, 4 rooms

**GOING TO PALAIS (MAISON) DE LA MUTUALITÉ (Welcome reception and Gala dinner)**  
24, rue Saint Victor – 75005 Paris – District 05



**Welcome reception:** Tuesday 7, 7:30pm-9:30pm  
Enjoy after that a pedestrian walk to « Notre Dame de Paris » and « île de la Cité » just at walking distance or a promenade in the « Quartier Latin » (between Boulevard Saint Germain and Boulevard de Port-Royal)

**Gala dinner:** Thursday 9, 7:00pm-12:59pm

To go there from CNAM - 2, rue Conté :

- 1) Metro line 11 Station « Arts et Métiers » to « Chatelet » and then Line 7 (Direction Jussieu) to Jussieu »  
or
- 2) Metro Line 4 Station « Réaumur-Sébastopol » (Direction Porte D'Orléans) to « Odeon » and then Line 10 (Direction Gare D'Austerlitz) to « Maubert-Mutualité » or « Cardinal-Lemoine »  
or
- 3) Bus 47: Direction « Fort du Kremlin-Bicêtre » from « Réaumur-Sébastopol » Bus Stop to « Maubert-Mutualité »

**Metro station:**  
Maubert-Mutualité (Metro 10)  
Cardinal-Lemoine (Metro 10)  
Jussieu (Metro 7)

### Wednesday 9 : Sightseeing Cruise « Les

Bateaux Parisiens » near Eiffel Tower :

5:00 pm : First boat (580p) leaving for cruise until 6:15pm

- 5:15pm : Second boat (300p) leaving for cruise until 6:30pm

- 5:30 pm : Third boat leaving (120p) for cruise until 6:45pm

*First arrived – First on board*

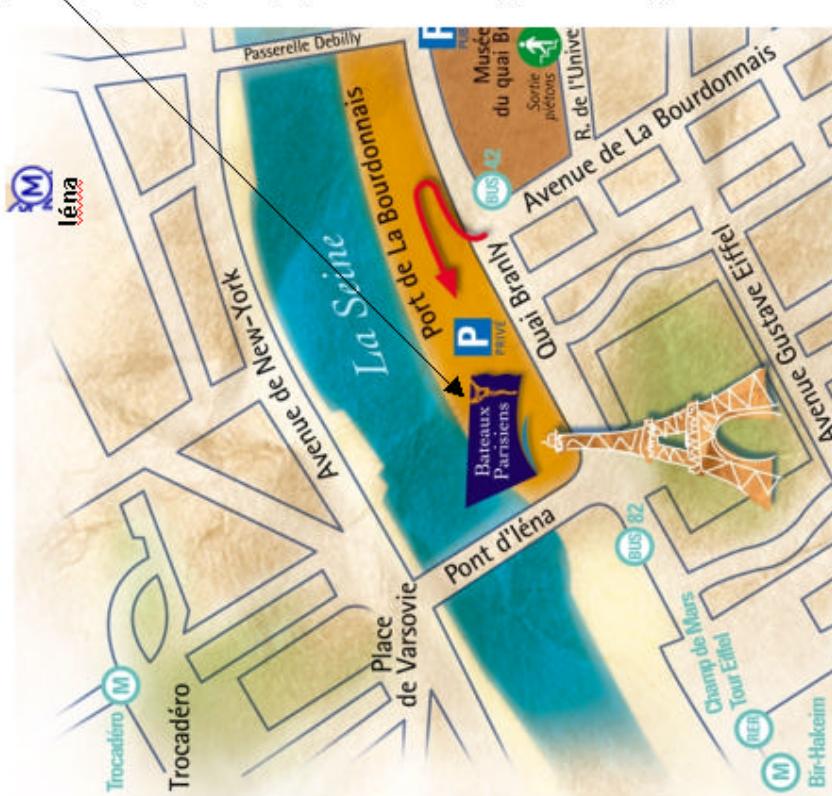
Allow 1 hour from CNAM - 2, rue Conte to go there

- 1) Bus 20 from « Porte Saint Martin »  
Direction Gare Saint Lazare to « Auber »  
and then go to bus stop « Opera-Scribe »  
bus 42 Direction « Hôpital Européen  
Georges Pompidou » to « Tour-Eiffel »  
Metro Line 4, from « Réaumur-  
Sébastopol » (Direction Porte D'Orléans)

- 2) to « Saint-Michel » and then RER C  
(Direction Versailles-Rive Gauche) to  
« Champ-de-Mars Tour Eiffel »  
Metro Line 3, from « Arts et Métiers »  
(Direction Pont de Levallois) to « Havre-  
Caumartin » then Line 9 (Direction Pont de  
Sèvres) to Trocadéro and then if sunny  
time allow walking down the stairs from  
Trocadero to Quai Branly (15min) or line 6  
(Direction Nation) to Bir-Hakeim

SIGHTSEEING CRUISE « LES BATEAUX PARISIENS » – Quai Branly - 75007 Paris - District 7

**HOW TO GO THERE**





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