

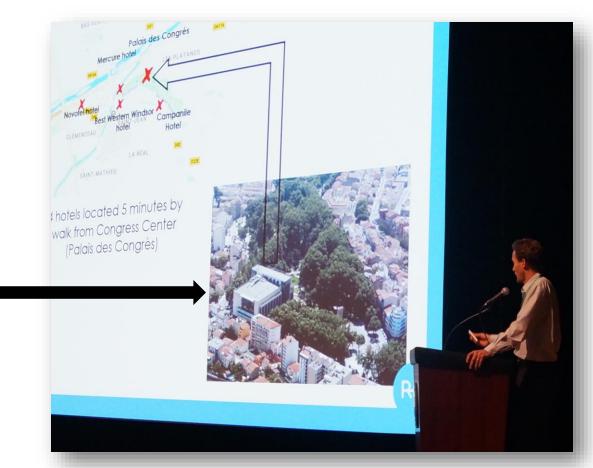
#### JUNE 17, 2019

SÉBASTIEN DENNETIERE - LOCAL COMMITTEE CHAIR



#### **IPST 2017 in Seoul - Closing Ceremony**

#### Perpignan was selected to host IPST 2019



As expected we are here !



**Contributions for Local Organisation** IPST2019 is... Le réseau Rte hosted by de transport d'électricité sponsored by PSCAD **Platinum Sponsors Gold Sponsors** ne reference for power systems transie Re Silver Sponsors internationa

**OPAL·RT** 

TECHNOLOGIES

SIEMENS



#### **IPST History**

- 1. IPST 1995 in Lisbon, Portugal
- 2. IPST 1997 in Seattle, USA
- 3. IPST 1999 in Budapest, Hungary
- 4. IPST 2001 in Rio de Janeiro, Brazil
- 5. IPST 2003 in New Orleans, USA
- 6. IPST 2005 in Montreal, Canada
- 7. IPST 2007 in Lyon, France
- 8. IPST 2009 in Kyoto, Japan
- 9. IPST 2011 in Delft, The Netherlands
- 10. IPST 2013 in Vancouver, Canada
- 11. IPST 2015 in Cavtat, Croatia
- 12. IPST 2017 in Seoul, Republic of Korea
- 13. IPST 2019 in Perpignan, France



#### **IPST 2019 organisation**

#### **IPST Steering Committee**

Co-chairperson: Correia de Barros, M. T. (Portugal)

Ametani, A. (Japan)

**IPST2019** Technical Committee

Co-chairperson: Tavares, M. C. (Brazil)

Funabashi, T. (Japan),

**IPST2019 Local Organizing Committee** 

Chairperson: Dennetière, S. (France)



#### **Time Schedule**

	Sunday 16th	Monday 17th	Tuesday 18th	Wednesday 19th	Thursday 20th
		Authors/Chair Meeting 1A, 1B (8:00 – 8:30)	Authors/Chair Meeting 4A, 4B, 5A, 5B (8:00 – 8:30)	Authors/Chair Meeting 8A, 8B, 9A, 9B (8:00 – 8:30)	Authors/Chair Meeting 10A, 10B, 11A, 11B (8:00 – 8:30)
Morning		Opening ceremony Keynote Session (8:30 – 10:15)	4A - Switching and Fault Transients III (8:30 - 10:15)	8A - Solution Methods and Algorithms I (08:30 - 10:00)	10A - Switching and Fault Transients IV (8:30 – 09:50)
Session 1			4B - Power Electronics, FACTS, HVDC I (8:30 - 10:15)	Ferroresonance (08:30 - 10:00)	10B - System Protection III (8:30 - 10:15)
		Coffee break (10:15 - 10:30)	Coffee break (10:15 - 10:30)	Coffee break (10:00 - 10:15)	Coffee break (10:15 - 10:30)
Morning		1A - Transmission Lines and Cables I (10:30 - 12:30)	5A - Lightning Surges and Insulation Coordination (10:30 - 12:30)	9A - Solution Methods and Algorithms II (10:15 - 11:35)	11A - Transmission Lines and Cables II (10:30-12:30)
Session 2		1B - Real-Time Simulators (10:30 - 12:30)	5B - Multi-Rate Simulations (10:30 - 12:30)	9B - Harmonics and Power Quality (10:15 - 11:35)	11B - Systems Dynamics (10:30-12:30)
		Lunch (12:30 – 13:30)	Lunch (12:30 – 13:30)	Presentation of technical tours (11:45 – 12:45) Room : JC Rolland	Lunch (12:30 – 13:45)
		Authors/Chair Meeting 2A, 2B, 3A, 3B (13:30 - 13:45)	Authors/Chair Meeting 6A, 6B, 7A, 7B (13:30 - 13:45)	Lunch (packaged) (12:45 - 14:00)	(12.30 - 13.43)
Afternoon Session 1	Assessment of VSC-HVDC links using EMT-type tools ( <i>Pre-</i> <i>conference</i>	2A - Switching and Fault Transients I (13:45 - 15:45)	6A - Fault Transients & Temporary Overvoltages (13:45 - 15:45)	_	Closing Ceremony (13:45 - 15:30)
36331011 1		2B - System Protection I (13:45 - 15:45)	6B - System Protection II (13:45 - 15:45)		Room : Amphithéâtre Charles Trenet
		Coffee break (15:45-16:00)	Coffee break (15:45-16:00)	Technical & Touristic Tour (14:00 - 18:00)	
Afternoon		3A - Transformers and Reactors (16:00 - 18:00)	7A - Renewable Energy Sources (16:00 - 17:20)		
Session 2		3B - Switching and Fault Transients II (16:00 - 18:00)	7B - Power Electronics, FACTS, HVDC II (16:00 - 17:20)		
	Welcome Reception (from 18:00)		Banquet Dinner (from 18:30)		



#### **Practical information for Authors**

Authors/Chair Meetings are held at 08:00 for all morning sessions and 13:30 for all afternoon sessions

20 minutes per presentation

This time includes: announcement of the talk, presentations, questions.

Fernando Moreira	4, 21, 57, 130, 151
Yi Zhang	35, 74, 73, 76, 112
Forooz Ghassemi	87, 15, 86, 69, 79, 92
Athula Rajapakse	58, 148, 59, 136, 118, 46
Washington Neves	33, 56, 129, 64, 41, 61
Grigoris Papagiannis	120, 145, 5, 116, 111, 1
lvo Uglešić	152, 127, 11, 45, 95
Ani Gole	25, 54, 6, 122, 85
Alain Xémard	51, 143, 60, 101, 97, 66
Shaahin Filizadeh	77, 65, 149, 82, 14, 121
Filipe Faria da Silva	98, 106, 30, 36, 9
Marjan Popov	134, 18, 12, 89, 144, 138
Athula Rajapakse	70, 72, 53
Shaahin Filizadeh	153, 114, 39, 47
Jeewantha de Silva	78, 8, 109, 38
Taku Noda	26, 80, 91
Jose Marti	10, 117, 100, 115
Maria Teresa de Barros	96, 44, 68
Antonio Lima	49, 137, 119, 32
Chul-Hwan Kim	22, 24, 28, 90, 29
Akihiro Ametani	2, 63, 43, 81, 31, 142
Jean Mahseredjian	50, 124, 40, 88, 102, 37



## **Volume 163** (Oct. 2018) of Electric Power Systems Research (EPSR) journal provided selected papers presented at the IPST 2017.

# This was the **fifth special issue** dedicated to IPST and published in the **EPSR journal**

In IPST 2019, **TC** will select papers recommended by **Session Chairs** for submission in the special issue of the EPSR journal.



### TC will select the best presentation in student papers recommended by Session Chairs.

#### Certificates will be awarded during the closing ceremony



#### **Erratum**

Day	Time	Session	Room	Session Title	Session Chair	Paper ID	
Sun, 16th	18:00- 20:00			Welcome Reception		-	
	8:30 - 10:15	-	JC Rolland	Opening Ceremony and Keynote Session		-	
	10:30 -	1A	JC Rolland	Transmission Lines and Cables I	Fernando Moreira	4, 21, 57, 130, 151	<b>•</b>
Man 17th	12:30	1B	11	Real-Time Simulators	Yi Zhang	35, 74, 3, 73, 76, 112	#3 is removed
Mon, 17th	13:45 -	2A	JC Rolland	Switching and Fault Transients I	Forooz Ghassemi	87, 15, 86, 69, 79, 92	
	15:45	2B	11	System Protection I	Athula Rajapakse	58, 148, 59, 136, 118, 46	
	16:00 -	3A	JC Rolland	Transformers and Reactors	Washington Neves	33, 56, 129, 64, 41, 61	
	18:00	3B	11	Switching and Fault Transients II	Grigoris Papagiannis	120, 145, 5, 116, 111, 1	
	8:30 -	4A	JC Rolland	Switching and Fault Transients III	Ivo Uglešić	152, 127, 11, 45, 95	
	10:15	4B	11	Power Electronics, FACTS, HVDC I	Ani Gole	25, 54, 6, 122, 85	
	10:30 -	5A	JC Rolland	Lightning Surges and Insulation Coordination	Alain Xémard	51, 143, 60, 101, 97, 66	
- 101	12:30	5B	11	Multi-Rate simulations	Shaahin Filizadeh	77, 65, 149, 82, 14, 121	
Tue, 18th	13:45 -	6A	JC Rolland	Fault Transients & Temporary Overvoltages	Filipe Faria da Silva	98, 106, 30, 36, 9	
	15:45	6B	11	System Protection II	Marjan Popov	134, 18, 12, 89, 144, 138	
	16:00 -	7A	JC Rolland	Renewable Energy Sources	Athula Rajapakse	70, 72, 53	
	17:20	7B	11	Power Electronics, FACTS, HVDC II	Shaahin Filizadeh	153, 114, 39, 47	
	8:30 -	8A	JC Rolland	Solution Methods and Algorithms I	Jeewantha de Silva	78, 8, 109, 38	
Wed, 19th	10:00	8B	11	Inrush Currents and Ferroresonance	Taku Noda	26, 80, 91	
Weu, 19th	10:15 -	9A	JC Rolland	Solution Methods and Algorithms II	Jose Marti	10, 117, 100, 115	
	11:35	9B	11	Harmonics & Power Quality	Maria Teresa de Barros	96, 44, 68	
	8:30 - 10:15	10A	Amphi. C. Trenet	Switching and Fault Transients IV	Antonio Lima	49, 137, 119, 75, 32	#75 is removed
		10B	11	System Protection III	Chul-Hwan Kim	22, 24, 28, 90, 29	
Thu, 20th	10:30 -	11A	Amphi. C. Trenet	Transmission Lines and Cables II	Akihiro Ametani	2, 63, 43, 81, 31, 142	
	12:30	11B	11	Systems Dynamics	Jean Mahseredjian	50, 124, 40, 88, 102, 37	
	13:45 - 15:30		Amphi. C. Trenet	Closing Ceremony			



#### Technical & Touristic Tour

	Sunday 16th	Monday 17th	Tuesday 18th	Wednesday 19th	Thursday 20th
		Authors/Chair Meeting 1A, 1B (8:00 – 8:30)	Authors/Chair Meeting 4A, 4B, 5A, 5B (8:00 – 8:30)	Authors/Chair Meeting 8A, 8B, 9A, 9B (8:00 – 8:30)	Authors/Chair Meeting 10A, 10B, 11A, 11B (8:00 – 8:30)
Morning		Opening ceremony Keynote Session (8:30 – 10:15)	4A - Switching and Fault Transients III (8:30 - 10:15)	8A - Solution Methods and Algorithms I (08:30 - 10:00)	10A - Switching and Fault Transients IV (8:30 – 09:50)
Session 1			4B - Power Electronics, FACTS, HVDC I (8:30 - 10:15)	8B - Inrush Currents and Ferroresonance (08:30 - 10:00)	10B - System Protection III (8:30 - 10:15)
		Coffee break (10:15 - 10:30)	Coffee break (10:15 - 10:30)	Coffee break (10:00 - 10:15)	Coffee break (10:15 - 10:30)
Morning		1A - Transmission Lines and Cables I (10:30 - 12:30)	5A - Lightning Surges and Insulation Coordination (10:30 - 12:30)	9A - Solution Methods and Algorithms II (10:15 - 11:35)	11A - Transmission Lines and Cables II (10:30-12:30)
Session 2		1B - Real-Time Simulators (10:30 - 12:30)	5B - Multi-Rate Simulations (10:30 - 12:30)	9B - Harmonics and Power Quality (10:15 - 11:35)	11B - Systems Dynamics (10:30-12:30)
		Lunch (12:30 – 13:30)	Lunch (12:30 – 13:30)	Presentation of technical tours (11:45 – 12:45) Room : JC Rolland	Lunch
		Authors/Chair Meeting 2A, 2B, 3A, 3B (13:30 - 13:45)	Authors/Chair Meeting 6A, 6B, 7A, 7B (13:30 - 13:45)	Luncn (раскадео) (12:45 - 14:00)	(12:30 – 13:45)
Afternoon	Assessment of VSC-HVDC links using EMT-type tools ( <i>Pre-</i> <i>conference</i>	2A - Switching and Fault Transients I (13:45 - 15:45)	6A - Fault Transients & Temporary Overvoltages (13:45 - 15:45)		Closing Ceremony (13:45 - 15:30)
Session 1		2B - System Protection I (13:45 - 15:45)	6B - System Protection II (13:45 - 15:45)		Room : Amphithéâtre Charles Trenet
		Coffee break (15:45-16:00)	Coffee break (15:45-16:00)	Technical & Touristic Tour (14:00 - 18:00)	
Afternoon		3A - Transformers and Reactors (16:00 - 18:00)	7A - Renewable Energy Sources (16:00 - 17:20)		
Session 2		3B - Switching and Fault Transients II (16:00 - 18:00)	7B - Power Electronics, FACTS, HVDC II (16:00 - 17:20)		
	Welcome Reception (from 18:00)		Banquet Dinner (from 18:30)		



#### **Technical & Touristic Tour**

#### Baixas HVDC Substation (INELFE project)



#### **Ensemble Eolien Catalan**



Each participant is assigned to 1 technical visit For all attendees: Presentation on each technical site prior to the visit

Rte

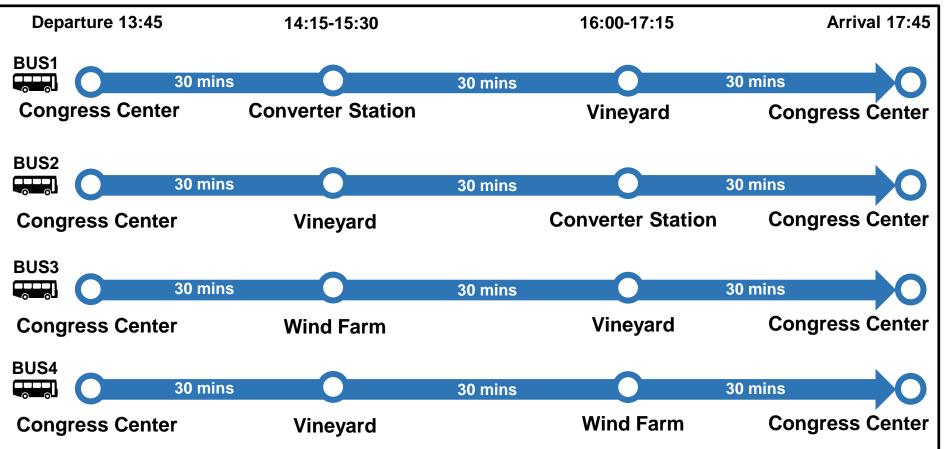
Le réseau

de transport d'électricité Dom Brial Vineyard and wine tasting





#### **Technical & Touristic Tour**





#### **Banquet dinner**

	Sunday 16th	Monday 17th	Tuesday 18th	Wednesday 19th	Thursday 20th
		Authors/Chair Meeting 1A, 1B (8:00 – 8:30)	Authors/Chair Meeting 4A, 4B, 5A, 5B (8:00 – 8:30)	Authors/Chair Meeting 8A, 8B, 9A, 9B (8:00 – 8:30)	Authors/Chair Meeting 10A, 10B, 11A, 11B (8:00 – 8:30)
Morning		Opening ceremony Keynote Session (8:30 – 10:15)	4A - Switching and Fault Transients III (8:30 - 10:15)	8A - Solution Methods and Algorithms I (08:30 - 10:00)	10A - Switching and Fault Transients IV (8:30 – 09:50)
Session 1			4B - Power Electronics, FACTS, HVDC I (8:30 - 10:15)	8B - Inrush Currents and Ferroresonance (08:30 - 10:00)	10B - System Protection III (8:30 - 10:15)
		Coffee break (10:15 - 10:30)	Coffee break (10:15 - 10:30)	Coffee break (10:00 - 10:15)	Coffee break (10:15 - 10:30)
Morning		1A - Transmission Lines and Cables I (10:30 - 12:30)	5A - Lightning Surges and Insulation Coordination (10:30 - 12:30)	9A - Solution Methods and Algorithms II (10:15 - 11:35)	11A - Transmission Lines and Cables II (10:30-12:30)
Session 2		1B - Real-Time Simulators (10:30 - 12:30)	5B - Multi-Rate Simulations (10:30 - 12:30)	9B - Harmonics and Power Quality (10:15 - 11:35)	11B - Systems Dynamics (10:30-12:30)
		Lunch (12:30 – 13:30)	Lunch (12:30 – 13:30)	Presentation of technical tours (11:45 – 12:45) Room : JC Rolland	Lunch (12:30 – 13:45)
		Authors/Chair Meeting 2A, 2B, 3A, 3B (13:30 - 13:45)	Authors/Chair Meeting 6A, 6B, 7A, 7B (13:30 - 13:45)	Lunch (packaged) (12:45 - 14:00)	(12.30 - 13.43)
Afternoon Session 1	Interaction Assessment of VSC-HVDC links using EMT-type tools ( <i>Pre-</i> <i>conference</i>	2A - Switching and Fault Transients I (13:45 - 15:45) 2B - System Protection I	6A - Fault Transients & Temporary Overvoltages (13:45 - 15:45) 6B - System Protection II		Closing Ceremony (13:45 - 15:30)
		(13:45 - 15:45)	(13:45 - 15:45)	Technical & Touristic Tour	Room : Amphithéâtre Charles Trenet
		Coffee break (15:45-16:00)	Coffee break (15:45-16:00)	(14:00 - 18:00)	
Afternoon Session 2		3A - Transformers and Reactors (16:00 - 18:00) 3B - Switching and Fault Transients II (16:00 - 18:00)	7A - Renewable Energy Sources (16:00 - 17:20) 7B - Power Electronics, FACTS, HVDC II (16:00 - 1 <u>7:20)</u>		
	Welcome Reception (from 18:00)		Banquet Dinner (from 18:30)		



#### Banquet Dinner at Mas Rières

19th century vault

surrounded by vineyard.









Lunches

#### From 12.30 to 13.30 Last floor / roof





Local Committee Members

### **NEP TV** Julia Milly and Thaïs Masson

#### RTE

Samy Akkari, Boris Bruned, Bertrand Clerc, Michel Julien, David Landier, César Martin, Vinicius Oiring, Ambroise Petit, Quentin Piraud, Pierre Rault, Hani Saad, Yannick Vernay



#### **IPST** badges – COLOR CODE





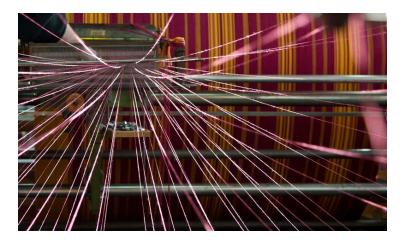


#### **NOTEBOOK COVER**

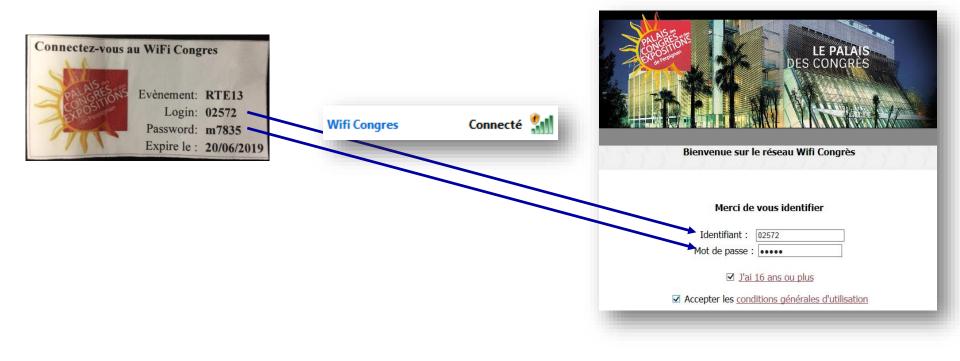


#### CATALAN MULTI-COLOURED FABRICS

The company only produces genuine products, **striped textiles** and original **Catalan multi-coloured fabrics** as a result of the original **sewing** methods used for their manufacturing.









#### M. T. Correia de Barros on behalf Steering Committee

#### M. C. Tavares on behalf Technical Committee

D. Landier on behalf RTE



### **ENJOY IPST 2019 !**

