

Scientific Programme of the
XXth International Conference on Gas
Discharges and their Applications

gd
2014



Orléans - France

Original paper no.	New paper no.	Scientific Session	Speaker
25693	H-1	H	Y. Zhao
26142	B-13	B2	H. Rabat
26317	B-27	B4	X. Wang
26494	E-3	E1	Y. Deng
26883	J-2	J	V. D. Karaventzas
27061	A-34	A5	Y. Tanaka
27062	A-43	A6	T. Nakano
27154	B-28	B4	X. Wang
27162	C-11	C	C. Mcgarvey
27214	A-24	A4	P. Kloc
27233	A-20	A3	M. M. Walter
27241	B-21	B4	L. Liu
27244	B-19	B3	D. Xiao
27248	E-14	E2	Y. Yasaka
27296	B-2	B1	A. Chollet
27307	A-4	A1	J. Liu
27338	A-9	A1	S. Pawar
27342	C-2	C	A. Chalkha
27347	A-14	A2	Q. Zhang
27348	E-4	E1	S. Aleiferis
27359	A-32	A5	M. Iwata
27360	J-7	J	X. Wang
27361	A-17	A3	M. Kotari
27362	A-11	A2	T. Takematsu
27364	F-9	F2	H. Zerrouki
27374	D-9	D2	A. Ustimenko
27376	D-8	D2	A. Ustimenko
27427	C-5	C	S. Chen
27428	J-1	J	G. Jones
27429	D-17	D3	A. Yang
27430	F-6	F2	T. Sakoda
27431	A-38	A5	L. Zhong
27434	K-7	K	L. Wei
27437	B-22	B4	D. Xiao
27447	K-4	K	S. Qin
27450	A-16	A2	J. Spencer
27451	I-1	I	O. Kravchenko
27453	K-2	K	Y. Deng
27461	C-9	C	Y. Fu
27466	F-13	F3	K. L. Pan
27467	A-13	A2	J. Zhang
27471	A-7	A1	J. Krowka
27474	F-2	F1	K. L. Pan
27477	F-5	F2	G. Wattieaux
27480	A-1	A1	F. Yang
27481	A-30	A4	Y. Wu
27484	C-1	C	Y. Wu
27485	L-1	L	I. Kosarev
27487	K-3	K	A. Chicheportiche
27489	L-2	L	I. Kosarev

Original paper no.	New paper no.	Scientific Session	Speaker
27492	A-22	A4	P. Freton
27498	B-6	B1	H. Höft
27502	K-11	K	W. Wang
27503	B-3	B1	J. Jones
27504	C-3	C	W. Wang
27506	A-49	A6	Y. Inada
27507	A-3	A1	E. Panousis
27508	E-11	E1	C. Chang
27510	D-12	D2	J. Mougenot
27511	A-5	A1	F. Yang
27512	A-26	A4	Y. Pei
27514	B-9	B1	P. Arnold
27516	E-9	E1	S. Stepanov
27517	D-15	D2	F. Clément
27519	J-5	J	S. Stepanov
27522	A-21	A4	J. Schmiedberger
27524	M-7	M1	X. Zhou
27528	A-35	A5	Y. Li
27529	M-3	M1	C. Leu
27552	I-2	I	O. Kravchenko
27561	A-40	A6	Y. Cressault
27600	M-4	M1	M. Zhu
27606	A-47	A6	X. Li
27607	A-19	A3	K. Zhu
27624	B-5	B1	H. Ueno
27626	A-6	A1	X. Li
27627	J-8	J	G. Wattieaux
27635	M-1	M1	S. Aleiferis
27639	A-12	A2	M. Sato
27643	K-9	K	M. Hilbert
27721	F-4	F2	K. Masur
27729	E-5	E1	P. Chapon
27753	A-10	A2	E. Fjeld
27816	D-11	D2	G. Pietsch
27817	D-10	D2	S. Wetzeler
27864	K-10	K	C. M. Franck
27947	D-14	D2	J. Y. Trepanier
27948	A-29	A4	P. G. Nikolic
27950	J-6	J	P. G. Nikolic
27981	B-16	B2	E. Fourré
28008	A-46	A6	A. Coulbois
28105	A-42	A6	M. Baeva
28139	D-13	D2	C. Rond
28148	A-48	A6	R. Putzu
28232	A-28	A4	M. Weuffel
28234	E-8	E1	J. F. Lagrange
28274	A-33	A5	G. Asanuma
28316	I-3	I	C. Zaepffel
28346	B-7	B1	A. Bouarouri
28380	B-8	B1	R. Tirumala

Original paper no.	New paper no.	Scientific Session	Speaker
28391	B-4	B1	R. Mathon
28492	B-26	B4	Y. Geng
28498	C-8	C	H. Iwabuchi
28501	K-6	K	H. Akashi
28502	A-27	A4	D. Eichhoff
28505	B-1	B1	O. Ducasse
28506	B-17	B3	R. Waters
28509	F-1	F1	O. Eichwald
28510	B-12	B2	G. Huang
28511	C-7	C	Z. L. Petrovic
28513	A-15	A2	S. Gorchakov
28515	C-10	C	A. Taran
28532	M-2	M1	C. Duluard
28543	B-20	B3	I. Adamovich
28549	B-15	B2	C. Zhang
28552	A-31	A4	T. Yoshino
28555	B-25	B4	K. Bayoda
28558	J-4	J	S. Arumugam
28562	A-44	A6	A. Maslani
28565	M-8	M2	A. Petin
28566	D-19	D3	Z. L. Petrovic
28567	F-7	F2	Y. Zhao
28568	F-8	F2	S. Iseni
28570	E-2	E1	N. Skoro
28572	A-8	A1	M. Becerra
28573	K-5	K	E. Filimonova
28574	B-24	B4	S. Okada
28575	A-41	A6	Y. Xia
28576	A-39	A6	Y. Okano
28578	K-8	K	N. Popov
28579	A-2	A1	A. B. Murphy
28580	L-3	L	A. B. Murphy
28584	B-18	B3	K. Takahashi
28585	G-2	G	M. Hogg
28586	B-11	B2	H. Mu
28587	B-29	B4	E. Moreau
28590	C-6	C	D. Tanaka
28591	D-18	D3	L. Yu
28594	F-3	F2	S. Hasse
28598	A-45	A6	F. Valensi
28599	D-20	D3	S. Stepanyan
28600	L-4	L	F. Valensi
28601	D-6	D2	S. Leonov
28604	D-3	D1	K. Chatelain
28605	E-6	E1	R. Jousot
28606	D-1	D1	L. Chauvet
28607	J-9	J	C. Laurent
28609	E-7	E1	A. Klochko
28610	B-23	B4	F. Pontiga
28611	A-37	A5	C. Yeo

Original paper no.	New paper no.	Scientific Session	Speaker
28616	A-36	A5	K. Tomita
28637	E-10	E1	F. Gherendi
28656	E-13	E2	W. P. Sun
28657	K-1	K	S. R. Sun
28669	D-7	D2	V. Felix
28670	F-11	F3	A. Khacef
28671	F-12	F3	A. Khacef
28678	D-5	D2	J. Gruber
28682	F-10	F3	T. Darny
28707	A-18	A3	B. Schottel
28708	E-1	E1	M. Mikikian
28726	A-25	A4	T. Sakuyama
28731	B-10	B2	K. Mehalaine
28736	G-1	G	D. Astanei
28737	D-2	D1	A. Farah Sougueh
28739	A-23	A4	Q. Castillon
28740	J-3	J	S. Pellerin
28743	M-6	M1	N. Cerqueira
28744	D-16	D3	P. Escot Bocanegra
28750	E-12	E2	S. Cuynet
28763	E-15	E2	F. Diop
28798	C-4	C	M. Kamarudin
28800	B-14	B2	J. S. Boisvert
35817	M-5	M1	M. Kühn-Kauffeldt
40040	D-4	D1	D. Zhou

Scientific Session	Original paper no.	New paper no.	Speaker
A1	27480	A-1	F. Yang
	28579	A-2	A. B. Murphy
	27507	A-3	E. Panousis
	27307	A-4	J. Liu
	27511	A-5	F. Yang
	27626	A-6	X. Li
	27471	A-7	J. Krowka
	28572	A-8	M. Becerra
	27338	A-9	S. Pawar
A2	27753	A-10	E. Fjeld
	27362	A-11	T. Takematsu
	27639	A-12	M. Sato
	27467	A-13	J. Zhang
	27347	A-14	Q. Zhang
	28513	A-15	S. Gorchakov
	27450	A-16	J. Spencer
A3	27361	A-17	M. Kotari
	28707	A-18	B. Schottel
	27607	A-19	K. Zhu
	27233	A-20	M. M. Walter
A4	27522	A-21	J. Schmiedberger
	27492	A-22	P. Freton
	28739	A-23	Q. Castillon
	27214	A-24	P. Kloc
	28726	A-25	T. Sakuyama
	27512	A-26	Y. Pei
	28502	A-27	D. Eichhoff
	28232	A-28	M. Weuffel
	27948	A-29	P. G. Nikolic
	27481	A-30	Y. Wu
	28552	A-31	T. Yoshino
A5	27359	A-32	M. Iwata
	28274	A-33	G. Asanuma
	27061	A-34	Y. Tanaka
	27528	A-35	Y. Li
	28616	A-36	K. Tomita
	28611	A-37	C. Yeo
	27431	A-38	L. Zhong
A6	28576	A-39	Y. Okano
	27561	A-40	Y. Cressault
	28575	A-41	Y. Xia
	28105	A-42	M. Baeva
	27062	A-43	T. Nakano
	28562	A-44	A. Maslani
	28598	A-45	F. Valensi
	28008	A-46	A. Coulbois
	27606	A-47	X. Li
	28148	A-48	R. Putzu
	27506	A-49	Y. Inada

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B1	28505	B-1	O. Ducasse
	27296	B-2	A. Chollet
	27503	B-3	J. Jones
	28391	B-4	R. Mathon
	27624	B-5	H. Ueno
	27498	B-6	H. Höft
	28346	B-7	A. Bouarouri
	28380	B-8	R. Tirumala
	27514	B-9	P. Arnold
	B2	28731	B-10
28586		B-11	H. Mu
28510		B-12	G. Huang
26142		B-13	H. Rabat
28800		B-14	J. S. Boisvert
28549		B-15	C. Zhang
27981		B-16	E. Fourné
B3	28506	B-17	R. Waters
	28584	B-18	K. Takahashi
	27244	B-19	D. Xiao
	28543	B-20	I. Adamovich
B4	27241	B-21	L. Liu
	27437	B-22	D. Xiao
	28610	B-23	F. Pontiga
	28574	B-24	S. Okada
	28555	B-25	K. Bayoda
	28492	B-26	Y. Geng
	26317	B-27	X. Wang
	27154	B-28	X. Wang
	28587	B-29	E. Moreau
	C	27484	C-1
27342		C-2	A. Chalkha
27504		C-3	W. Wang
28798		C-4	M. Kamarudin
27427		C-5	S. Chen
28590		C-6	D. Tanaka
28511		C-7	Z. L. Petrovic
28498		C-8	H. Iwabuchi
27461		C-9	Y. Fu
28515		C-10	A. Taran
27162		C-11	C. Mcgarvey
D1	28606	D-1	L. Chauvet
	28737	D-2	A. Farah Sougueh
	28604	D-3	K. Chatelain
	40040	D-4	D. Zhou

Scientific Session	Original paper no.	New paper no.	Speaker
D2	28678	D-5	J. Gruber
	28601	D-6	S. Leonov
	28669	D-7	V. Felix
	27376	D-8	A. Ustimenko
	27374	D-9	A. Ustimenko
	27817	D-10	S. Wetzeler
	27816	D-11	G. Pietsch
	27510	D-12	J. Mougenot
	28139	D-13	C. Rond
	27947	D-14	J. Y. Trepanier
27517	D-15	F. Clément	
D3	28744	D-16	P. Escot Bocanegra
	27429	D-17	A. Yang
	28591	D-18	L. Yu
	28566	D-19	Z. L. Petrovic
	28599	D-20	S. Stepanyan
E1	28708	E-1	M. Mikikian
	28570	E-2	N. Skoro
	26494	E-3	Y. Deng
	27348	E-4	S. Aleiferis
	27729	E-5	P. Chapon
	28605	E-6	R. Jousset
	28609	E-7	A. Klochko
	28234	E-8	J. F. Lagrange
	27516	E-9	S. Stepanov
	28637	E-10	F. Gherendi
27508	E-11	C. Chang	
E2	28750	E-12	S. Cuynet
	28656	E-13	W. P. Sun
	27248	E-14	Y. Yasaka
	28763	E-15	F. Diop
F1	28509	F-1	O. Eichwald
	27474	F-2	K. L. Pan
F2	28594	F-3	S. Hasse
	27721	F-4	K. Masur
	27477	F-5	G. Wattieaux
	27430	F-6	T. Sakoda
	28567	F-7	Y. Zhao
	28568	F-8	S. Iseni
	27364	F-9	H. Zerrouki
F3	28682	F-10	T. Darny
	28670	F-11	A. Khacef
	28671	F-12	A. Khacef
	27466	F-13	K. L. Pan

Scientific Session	Original paper no.	New paper no.	Speaker
G	28736	G-1	D. Astanei
	28585	G-2	M. Hogg
H	25693	H-1	Y. Zhao
I	27451	I-1	O. Kravchenko
	27552	I-2	O. Kravchenko
	28316	I-3	C. Zaepffel
J	27428	J-1	G. Jones
	26883	J-2	V. D. Karaventzas
	28740	J-3	S. Pellerin
	28558	J-4	S. Arumugam
	27519	J-5	S. Stepanov
	27950	J-6	P. G. Nikolic
	27360	J-7	X. Wang
	27627	J-8	G. Wattieaux
	28607	J-9	C. Laurent
K	28657	K-1	S. R. Sun
	27453	K-2	Y. Deng
	27487	K-3	A. Chicheportiche
	27447	K-4	S. Qin
	28573	K-5	E. Filimonova
	28501	K-6	H. Akashi
	27434	K-7	L. Wei
	28578	K-8	N. Popov
	27643	K-9	M. Hilbert
	27864	K-10	C. M. Franck
	27502	K-11	W. Wang
L	27485	L-1	I. Kosarev
	27489	L-2	I. Kosarev
	28580	L-3	A. B. Murphy
	28600	L-4	F. Valensi
M1	27635	M-1	S. Aleiferis
	28532	M-2	C. Duluard
	27529	M-3	C. Leu
	27600	M-4	M. Zhu
	35817	M-5	M. Kühn-Kauffeldt
	28743	M-6	N. Cerqueira
	27524	M-7	X. Zhou
M2	28565	M-8	A. Petin

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Presentation information

All GD2014 papers will to be presented orally and in English.

- **Invited lectures** will be given **45 minutes**, including related discussions.
- **Normal presentations** of contributed papers must be made in **12 minutes**: 10 minutes for the presentation and 2 minutes for questions.

The presentations are scheduled in two parallel sessions. Both lecture halls (Cabannes and Blaise) are located at the same floor (see plan at the end of this booklet).

Standard audio-visual equipment will be available, including LCD projector, screen, pointer and microphone.

The presentation file must be given on a portable USB stick in MS Powerpoint format or PDF format to the conference secretary (registration desk) at least half day before the presentation.

The use of the laptop provided in the conference room is recommended. Speakers can connect their own laptop to the projector. In that case, a VGA cable with male connector will be provided for hooking up your laptop and a test during the break time is strongly recommended. Most computers require an adapter that varies by brand (Mac/PC) and even by model. Please ensure you bring the proper adapter that will fit your computer (no adapters will be available on site). If you have a video or audio file embedded in the presentation we recommend using a standard video and audio codec compatible with Microsoft PowerPoint.

All speakers must introduce themselves to the chairman session in their lecture hall, and test the presentation/laptop at least 5 minutes before the start of the corresponding session.

Sunday, 6th July 2014

15:00-20:00	Registration <i>Agora</i>
18:00-20:00	Welcome Reception <i>Agora</i>

Monday, 7th July 2014

08:00-09:00	Registration <i>Next to Cabannes Lecture Hall</i>	
09:00-09:30	Opening Ceremony <i>Cabannes Lecture Hall</i>	
09:30-10:15	Invited Lecture (Cabannes Lecture Hall) M. S. Benilov (Portugal) Understanding and modelling plasma-cathode interaction: Roots of gaseous and vacuum arcs, spots on glow cathodes Chair: J.E. Jones	
10:15-10:30	Tea & Coffee Break	
10:30-12:30	Cabannes Lecture Hall A1 - Arcs Chair: J.W. Spencer	Blaise Lecture Hall B1 - Corona, Barrier and Surface Discharges Chair: G. J. Pietsch
	A-1 A comparative study of K-epsilon turbulence model in Air DC circuit breaker M. Wu, M. Rong, F. Yang, Y. Wu, J. Zhu, C. Niu Speaker: F. Yang	B-1 3D tests of Poisson equation solvers for streamer simulation O. Ducasse, P. Dessante, C. Jacobs, O. Eichwald, N. Renon, M. Yousfi Speaker: O. Ducasse
	A-2 A computational model of MIG welding: effects of metal vapour, and mixing of wire and workpiece alloys A. B. Murphy Speaker: A. B. Murphy	B-2 A diffuse nanosecond discharge for generation of reactive species in atmospheric air A. Chollet, P. Jeanney, P. Tardiveau, S. Pasquiers Speaker: A. Chollet
	A-3 Active optical diagnostics of a "current-zero-like" arc in air in a model gas circuit breaker geometry E. Panousis, P. Stoller, J. Carstensen, M. Schwinne Speaker: E. Panousis	B-3 Ball lightning: an assessment of the known physical features and a suggested mathematical model J. Jones Speaker: J. Jones
	A-4 Air arcs burning in turbulent round jet J. Liu, Q. Zhang, J. Yan, M. Fang Speaker: J. Liu	B-4 Bipolar ions extraction from dielectric barrier discharge R. Mathon, N. Jidenko, J. P. Borra Speaker: R. Mathon
	A-5 An experimental investigation of nozzle arcs under turbulent conditions F. Yang, Y. Pei, J. Yan, J. Humphries, J. Spencer Speaker: F. Yang	B-5 Comparative investigation of creeping discharge characteristics at wavefront of pulse voltage in SF6/N2 and CO2/N2 gas mixtures H. Ueno, R. Tanaka, Y. Shimizu, Y. Amakawa, H. Shimada, S. Okada Speaker: H. Ueno

<p>A-6 Analysis of the valves effect on the gas flow field and arcing process in a self-blast circuit breaker X. Jiang, Q. Wang, X. Li Speaker: X. Li</p>	<p>B-6 Controlling inception and breakdown characteristics in pulsed dielectric barrier discharges with variable pulse width - influence of the pre-phase H. Höft, M. Kettlitz, M. Becker, T. Hoder, K. D. Weltmann, R. Brandenburg Speaker: H. Höft</p>
<p>A-7 Suspension phased-injection in self-sustained pulsed arc jet J. Krowka, V. Rat, C. Chazelas, J. F. Coudert Speaker: J. Krowka</p>	<p>B-7 Corona discharge used as an ion source for aerosol charging A. Bouarouri, N. Jidenko, J. P. Borra, F. Gensdarmes, D. Maro, D. Boulaud Speaker: A. Bouarouri</p>
<p>A-8 Arc jets blown by outgassing polymers in air M. Becerra, A. Friberg Speaker: M. Becerra</p>	<p>B-8 Correlation between the discharge regime and heat generation in a surface DBD plasma actuator R. Tirumala, N. Benard, E. Moreau, M. Fenot, G. Lalizel, E. Dorignac Speaker: R. Tirumala</p>
<p>A-9 CFD based multi-physics simulation of compressible flow through nozzle of SF6 gas circuit breaker S. Pawar, A. Sharma Speaker: S. Pawar</p>	<p>B-9 Discharge phenomena at partially damaged dielectric electrode coatings in SF6-insulated systems at AC and DC stress P. Arnold, M. Hering, S. Tenbohlen, W. Köhler, U. Riechert, U. Straumann Speaker: P. Arnold</p>
<p>12:30-14:00 Lunch RU Forum</p>	
<p>14:00-14:45 Invited Lecture (Cabannes Lecture Hall) L. Wang, X. Meng, H. Mei, Z. Guan (China) Characteristics of streamer propagation along insulation surface: Influence of dielectric material and shed configuration Chair: G.J. Pietsch</p>	
<p>14:45-14:55 Break</p>	
<p>14:55-16:30 Cabannes Lecture Hall A2 - Arcs Chair: Y. Tanaka</p>	<p>Blaise Lecture Hall B2 - Corona, Barrier and Surface Discharges Chair: J.-P. Borra</p>
<p>A-10 Cloud formation during high current arcs in air E. Fjeld, S. T. Hagen, D. Bjerketvedt Speaker: E. Fjeld</p>	<p>B-10 Effects of corona discharges on turbulent air flow: simulation on a high-lift system K. Mehalaine, D. Semmar Speaker: K. Mehalaine</p>
<p>A-11 CO2 arc behavior during current interruption process in a gas circuit breaker with externally applied magnetic field T. Takematsu, S. Hirayama, T. Fujino, M. Ishikawa, S. Ogawa, T. Mori Speaker: T. Takematsu</p>	<p>B-11 Effects of gas pressure and ambience on surface barrier discharge along PVDF film H. Mu, G. Su, S. Zhao, G. Zhang, Y. Liao, R. Li Speaker: H. Mu</p>
<p>A-12 Comparison of metal erosion characteristics due to arc in Air and SF6 M. Sato, K. Horinouchi, D. Yoshida Speaker: M. Sato</p>	<p>B-12 Effects of rise rate of voltage impulses on oxygen-fed dielectric barrier discharge G. Huang, T. Wang, I. Timoshkin, S. Macgregor, M. Given, M. Wilson Speaker: G. Huang</p>

	<p>A-13 Computational investigation of effects of SF₆, CO₂ and N₂ on arc interruption in a supersonic nozzle J. Zhang Speaker: J. Zhang</p>	<p>B-13 Experimental study of the ozone produced by a plasma actuator using surface dielectric barrier discharge H. Rabat, J. M. Bauchire, M. B. Chang, D. Hong Speaker: H. Rabat</p>
	<p>A-14 Effects of nozzle geometry on SF₆ arc thermal interruption Q. Zhang, J. Yan, M. Fang Speaker: Q. Zhang</p>	<p>B-14 Fundamentals of atmospheric pressure RF modulated DBD J. S. Boisvert, J. Margot, F. Massines Speaker: J. S. Boisvert</p>
	<p>A-15 Effects of radiation trapping in a free-burning arc Ar plasma M. Baeva, Y. Golubovskii, S. Gorchakov, D. Kalanov, D. Uhrlandt, T. Schoenemann Speaker: S. Gorchakov</p>	<p>B-15 Hydrophobic modification of polyethylene terephthalate surface using nanosecond-pulse DBD at atmospheric pressure C. Zhang, T. Shao, J. Xu, P. Yan Speaker: C. Zhang</p>
	<p>A-16 Empirical model for quasi direct current interruption with a convoluted arc L. Shpanin, G. Jones, J. Humphries, J. Spencer, N. Shammas, S. Tennakoon Speaker: J. Spencer</p>	<p>B-16 In situ DRIFT analysis coupled to non thermal plasma at atmospheric pressure on the decomposition of volatil organic compounds A. Rodrigues, E. Fourré, J. M. Tatibouët Speaker: E. Fourré</p>
16:30-16:45	Tea & Coffee Break	
16:45-17:40	<p>Cabannes Lecture Hall A3 - Arcs Chair: J. F. Coudert</p>	<p>Blaise Lecture Hall B3 - Corona, Barrier and Surface Discharges Chair: H. Mei</p>
	<p>A-17 Experimental evaluation of fraction k_p of electrical energy contributing to pressure rise due to Air and SF₆ arc in a closed container M. Kotari, T. Tadokoro, S. Tanaka, M. Iwata, T. Amakawa Speaker: M. Kotari</p>	<p>B-17 Infrared imaging of dry-band failure of silicone-rubber insulators M. Albano, P. Charalampidis, H. Griffiths, A. M. Haddad, R. Waters Speaker: R. Waters</p>
	<p>A-18 Experimental investigation of short-time arc propagation recorded by high speed camera B. Schottel, T. Kopp, T. Runge, M. Kurrat Speaker: B. Schottel</p>	<p>B-18 Investigation of active species in atmospheric-pressure argon plasma-jet K. Takahashi, K. Satoh, H. Itoh Speaker: K. Takahashi</p>
	<p>A-19 Experimental study on characteristics of CO₂ and its gas mixtures with SF₆ for high voltage gas circuit breakers K. Zhu, X. Li, X. Jiang, H. Zhao, S. Jia, J. Zhong Speaker: K. Zhu</p>	<p>B-19 Lighting impulse discharge characteristic of composite insulator developed for applying in 3500m altitude D. Tan, H. Li, D. Xiao, Y. Deng, J. Jiang Speaker: D. Xiao</p>
	<p>A-20 High accuracy characterization of wall constricted arcs M. M. Walter, C. M. Franck Speaker: M. M. Walter</p>	<p>B-20 Nanosecond pulse surface ionization wave discharges over solid and liquid dielectric surfaces V. Petrishev, S. Leonov, I. Adamovich Speaker: I. Adamovich</p>
17:45-19:00	<p>Workshop 1 (Cabannes Lecture Hall) Properties of thermal and quasi-thermal plasmas Chair: Y. Cressault</p>	<p>Workshop 2 (Blaise Lecture Hall) Electrohydrodynamic effects produced by corona, barrier and surface discharges Chair: E. Moreau</p>

Tuesday, 8th July 2014

09:00-09:45	Invited Lecture (<i>Cabannes Lecture Hall</i>) E. Siewert, B. Bachmann, M. Kühn-Kauffeldt and <u>J. Schein</u> (Germany) <i>Innovative diagnostics for thermal plasma processes</i> Chair: A. Gleizes	
09:45-10:00	Tea & Coffee Break	
10:00-12:30	<i>Cabannes Lecture Hall</i> A4 - Arcs Chair: M. Benilov, G. R. Jones A-21 Hybrid radiofrequency/arc plasma jet for generation of singlet oxygen J. Schmiedberger, J. Gregor, M. Censký, V. Jirásek, K. Rohlena, A. Vodicková Speaker: J. Schmiedberger A-22 Improved modeling of ablation process in high-voltage circuit breakers for switching arc simulation A. Petchanka, F. Reichert, J. J. Gonzalez, P. Freton, Speaker: P. Freton A-23 Influence of active shielding gas on the MIG-MAG welding process: globular to spray transfer mode Q. Castillon, F. Valensi, S. Pellerin, N. Pellerin, K. Dzierzega, F. Faubert, F. Briand, J. P. Planckaert Speaker: Q. Castillon A-24 Influence of copper vapours on the radiative transfer in thermal air plasma P. Kloc, V. Aubrecht, O. Coufal, M. Bartlova Speaker: P. Kloc A-25 Interrupter size effect on current zero properties in thermal interruption of high voltage circuit breakers T. Sakuyama, H. Urai, H. Kotsuji, N. Yaginuma, M. Tsukushi Speaker: T. Sakuyama A-26 Interruption capability of an auto-expansion circuit breaker with different arc duration Y. Pei, J. D. Yan Speaker: Y. Pei A-27 Investigations on switching arcs in CO ₂ by time-resolved optical emission spectroscopy and CFD simulations P. G. Nikolic, D. Eichhoff, R. Kozakov, D. Uhrlandt, A. Schnettler Speaker: D. Eichhoff A-28 Investigations on the spatial arc resistance distribution of an axially blown switching arc M. Weuffel, P. G. Nikolic, A. Schnettler Speaker: M. Weuffel	<i>Blaise Lecture Hall</i> B4 - Corona, Barrier and Surface Discharges F1 - Environmental and Medical Applications Chair: I. Adamovich, K. Satoh B-21 On the transition from positive glow corona to streamers in air L. Liu, M. Becerra Speaker: L. Liu B-22 Overview on gas discharge occurring in air insulated metal enclosed switchgear H. Li, D. Tan, D. Xiao, Y. Deng, J. Jiang Speaker: D. Xiao B-23 Ozone production by corona discharge using a hollow needle-plate electrode system F. Pontiga, K. Hadji, M. Guemou, K. Yanallah, A. Fernández-Rueda, H. Moreno Speaker: F. Pontiga B-24 Propagated velocity of surface discharge in Ne/Xe mixtures S. Okada, H. Ueno Speaker: S. Okada B-25 Recent developments in nanosecond pulsed sliding discharge for airflow control K. Bayoda, N. Benard, E. Moreau Speaker: K. Bayoda B-26 Streamer inception E-field criterion under positive lightning impulse voltage considering voltage rise rate Y. Geng, C. Zhuang, S. Chen, R. Zeng Speaker: Y. Geng B-27 Study on shed cracks of composite insulators used at 750kV AC lines in strong wind area X. Wang, H. Fu, S. Wang, Z. Zhang, M. Zhong, Z. Zhu, G. Ma, Z. Jia, Z. Guan Speaker: X. Wang B-28 The influence of water permeability and water absorption on RTV silicone rubber C. Chen, X. Wang, Q. Xie, H. Wang, L. Yao, Z. Jia Speaker: X. Wang

	<p>A-29 Investigations on the thermal interruption capability of CO₂ in nozzle systems with two heating channels P. G. Nikolic, M. Weuffel, A. Schnettler Speaker: P. G. Nikolic</p>	<p>B-29 Nanosecond pulsed dielectric barrier discharges applied to electrostatic precipitation A. C. Aba'a Ndong, N. Zouzou, E. Moreau Speaker: E. Moreau</p>
	<p>A-30 MHD modeling of AC fault arc in a closed air container M. Li, H. Zhao, M. Rong, Y. Wu, Y. Wu, C. Hou, F. Yang Speaker: Y. Wu</p>	<p>F-1 2D modeling of electro-hydrodynamics and chemical kinetic of dry and humid air flow activated by corona discharges O. Eichwald, J. P. Sarrette, O. Ducasse, M. Yousfi Speaker: O. Eichwald</p>
	<p>A-31 New approach to predict SLF interruption performance in high voltage circuit breaker T. Yoshino, Y. Nakazawa, S. Ogawa, K. Udagawa, T. Shinkai, T. Koshizuka, T. Mori Speaker: T. Yoshino</p>	<p>F-2 Application of non-thermal plasma technology for developing fast SCR system to remove NO_x S. H. Lin, K. L. Pan, S. J. Yu, S. Y. Yan, M. Chang Speaker: K. L. Pan</p>
<p>12:30-14:00</p>	<p>Lunch RU Forum</p>	
<p>14:00-14:45</p>	<p>Invited Lecture (Cabannes Lecture Hall) <u>J.M. Pouvesle</u> and E. Robert (France) <i>Non thermal atmospheric plasma jets: A new way for cancer treatment?</i> Chair: A.B. Murphy</p>	
<p>14:45-14:55</p>	<p>Break</p>	
<p>14:55-16:30</p>	<p><i>Cabannes Lecture Hall</i> A5 - Arcs Chair: J. Yan</p> <p>A-32 Numerical approach to pressure rise due to short-circuit fault arc in the metal-clad switchgears M. Iwata, T. Miyagi, Y. Goda, Y. Suzuki, K. Shirai Speaker: M. Iwata</p> <p>A-33 Numerical simulation of pressure rising with internal arc fault for a medium voltage metal clad switchgear G. Asanuma, T. Onchi, M. Isozaki Speaker: G. Asanuma</p> <p>A-34 Numerical simulation on two-temperature chemically non-equilibrium states in decaying SF₆ arcs after application of recovery voltage Y. Tanaka, K. Suzuki Speaker: Y. Tanaka</p> <p>A-35 Numerical study on self-excited oscillation switching current in HVDC MRTB Y. Li, M. Rong, C. Niu, Y. Wu, M. Li, F. Yang Speaker: Y. Li</p>	<p><i>Blaise Lecture Hall</i> F2 - Environmental and Medical Applications Chair: J.-M. Pouvesle</p> <p>F-3 Basic research in plasma medicine: support for the transfer into clinics K. Masur, S. Hasse, K. D. Weltmann, H. R. Metelmann, T. Von Woedtke Speaker: S. Hasse</p> <p>F-4 Eukaryotic cells as biomarkers for plasma-generated reactive species S. Bekeschus, K. Masur, S. Hasse, K. D. Weltmann Speaker: K. Masur</p> <p>F-5 Experimental quantification of ultraviolet radiations and biocide active species in microwave argon plasma jet in open air G. Wattieaux, F. Judée, N. Merbahi, M. Yousfi, M. P. Castanié-Cornet, M. Mansour Speaker: G. Wattieaux</p> <p>F-6 Gas-liquid interfacial discharge with a porous glass membrane T. Sakoda, T. Mine Speaker: T. Sakoda</p>

	<p>A-36 Optical diagnostics of decay processes of Ar/SF6 gas blast arcs confined by a nozzle K. Tomita, D. Gojima, K. Nagai, T. Shimizu, K. Uchino, Y. Tanaka, K. Suzuki, T. Iijima, T. Uchii, T. Shinkai Speaker: K. Tomita</p>	<p>F-7 Investigation of plasma-induced methylene blue degradation using dielectric barrier discharge Y. Zhao, T. Wang, S. Macgregor, M. Wilson, M. Given, I. Timoshkin Speaker: Y. Zhao</p>
	<p>A-37 Prediction of pressure rise build-up in a self-blast high voltage circuit breaker using CFD simulation C. Yeo, J. J. Chae, J. Kim Speaker: C. Yeo</p>	<p>F-8 Laminar versus turbulent flow of an argon RF APPJ investigated by OH PLIF and its influence on the discharge propagation S. Iseni, A. Schmidt Bleker, J. Winter, K. D. Weltmann, S. Reuter Speaker: S. Iseni</p>
	<p>A-38 Predominant particles in SF6-Cu mixture at temperatures of 300-50,000 K L. Zhong, X. Wang, A. Yang, D. Liu, Y. Wu, M. Rong Speaker: L. Zhong</p>	<p>F-9 Lipid A removal by a reduced pressure nitrogen afterglow H. Zerrouki, V. Rizzati, C. Bernis, J. P. Sarrette, S. Cousty, A. Negre-Salvayre Speaker: H. Zerrouki</p>
16:30-16:45	Tea & Coffee Break	
16:45-17:40	<p><i>Cabannes Lecture Hall</i> D1 - High Pressure Plasmas and Applications Chair: J.-Y. Trepanier</p>	<p><i>Blaise Lecture Hall</i> F3 - Environmental and Medical Applications Chair: S. Starikoskaia</p>
	<p>D-1 Characterization of an atmospheric DBD plasma jet with optical emission and mass spectrometers L. Chauvet, B. Caillier, L. Therese, P. Guillot, C. Muja Speaker: L. Chauvet</p>	<p>F-10 Modulation of ionization front propagation velocity in a ms plasma gun helium discharge with nitrogen admixture T. Darny, E. Robert, S. Dozias, J. M. Pouvesle Speaker: T. Darny</p>
	<p>D-2 Comparative study of laser induced breakdown in argon using optical emission spectroscopy and Thomson scattering A. Farah Sougueh, A. Mendys, T. Pieta, K. Dzierzega, S. Pellerin, J. Hermann Speaker: A. Farah Sougueh</p>	<p>F-11 Plasma-assisted diesel oxidation catalyst: improvement of light-off temperature for CO and unburned hydrocarbons A. Leray, M. Makarov, J. M. Cormier, A. Khacef Speaker: A. Khacef</p>
	<p>D-3 Discharge morphology and spectral diagnostic of a serrated DBD plasma actuator dedicated to aerodynamic flow control applications K. Chatelain, R. Jousot, A. Leroy, V. Lago, H. Rabat, D. Hong Speaker: K. Chatelain</p>	<p>F-12 Pulsed DBD-catalyst hybrid reactor for environmental clean-up: VOCs oxidation in air at low temperature T. Pham Huu, M. Adamowska, P. Da Costa, J. M. Cormier, A. Khacef Speaker: A. Khacef</p>
	<p>D-4 Effect of ground electrode on stability of plasma jet D. Zhou, J. Tang, C. Zhang Speaker: D. Zhou</p>	<p>F-13 Removal of phenol (C6H5OH) from gas streams with plasma catalysis K. L. Pan, H. H. Peng, D. L. Chen, M. B. Chang Speaker: K. L. Pan</p>
17:45-19:00	<p>Workshop 3 (<i>Cabannes Lecture Hall</i>) Modeling of HV circuit breakers: where do we stand and what are the challenges Chair: M. Seeger</p>	<p>Workshop 4 (<i>Blaise Lecture Hall</i>) Major challenges in the diagnostics of non thermal plasma sources relevant for biomedical applications Chair: E. Robert</p>
20:30-00:00	Festive Evening	

Wednesday, 9th July 2014

09:00-09:45	Invited Lecture (Cabannes Lecture Hall) U. Ebert (The Netherlands) <i>Streamers and nanosecond pulsed discharges: Theory and experiments</i> Chair: O. Eichwald	
09:45-10:00	Tea & Coffee Break	
10:00-12:30	<i>Cabannes Lecture Hall</i> D2 - High Pressure Plasmas and Applications Chair: P. Freton, Y. Wu	<i>Blaise Lecture Hall</i> C - Glows and Breakdown Chair: K. Hidaka, U. Ebert
	D-5 Effects of arc current modulation on dominant oscillations in plasma jet J. Gruber, J. Hlína, J. Sönský Speaker: J. Gruber	C-1 A hybrid circuit breaker based on two-stage commutation Y. Wu, M. Rong, H. Zhao, C. Niu, M. Li, Y. Hu, Z. Yang Speaker: Y. Wu
	D-6 Electrical discharge in supercritical methanol S. Leonov Speaker: S. Leonov	C-2 Characterisation, performance and stability of a glow discharge as a source of electrons for portable mass spectrometry A. Chalkha, C. Despenes, A. Janulyte, Y. Zerega, B. Brkic, S. Taylor, J. Andre Speaker: A. Chalkha
	D-7 Gas chemistry related to the operation of microHollow cathode discharges V. Felix, J. Golda, P. Lefauchaux, L. Overzet, V. Schulz-Von Der Gathen, O. Aubry, R. Dussart Speaker: V. Felix	C-3 Dielectric properties of hot SF6 gaseous mixture under chemically non-equilibrium condition W. Wang, M. Rong, J. Yan, J. W. Spencer Speaker: W. Wang
	D-8 High pressure gas discharge devices application for fuel processing V. Messerle, A. Ustimenko, O. Lavrichshev, E. Ossadchaya Speaker: A. Ustimenko	C-4 Experimental investigation of CF3I-CO2 gas mixtures under lightning impulses M. Kamarudin, A. Haddad, S. J. Macgregor Speaker: M. Kamarudin
	D-9 High pressure plasma torch V. Messerle, A. Ustimenko, V. Ushanov Speaker: A. Ustimenko	C-5 Experimental observation of two types of streamer region ahead of leader in long air gap discharge S. Chen, R. Zeng, C. J. Zhuang, X. Zhou, Y. J. Ding Speaker: S. Chen
	D-10 Influence of arc energy absorbers on the enclosure effect in case of internal arcing in electrical installations S. Wetzeler, K. Anantavanich, G. Pietsch Speaker: S. Wetzeler	C-6 Experimental study on concurrent flashover phenomena of two parallel long air gaps D. Tanaka, T. Miki, M. Miki Speaker: D. Tanaka
	D-11 Influence of insulation gas on pressure rise in electrical installations due to internal arcs S. Wetzeler, Y. Cressault, G. Pietsch Speaker: G. Pietsch	C-7 Monte Carlo simulation of radio-frequency breakdown in argon M. Savic, M. Radmilovic-Radjenov, M. Suvakov, D. Maric, Z. L. Petrovic Speaker: Z. L. Petrovic
	D-12 Interaction model between an electrical arc and a material: welding TIG application J. Mougnot, J. J. Gonzalez, P. Freton, M. Masquère Speaker: J. Mougnot	C-8 Polarity effect on breakdown phenomenon across micrometer-scale surface gap in atmospheric air H. Iwabuchi, S. Matsuoka, A. Kumada, K. Hidaka Speaker: H. Iwabuchi

	D-13 Investigation of H ₂ /CH ₄ and H ₂ /CH ₄ /B ₂ H ₆ high pressure-high power microwave plasma chemistry using IR-TDLAS C. Rond, S. Hamann, M. Wartel, G. Lombardi, K. Hassouni, A. Gicquel, J. Röpcke Speaker: C. Rond	C-9 Study on similarity of glow discharge at low pressure by numerical simulation Y. Fu, X. Zou, H. Luo, X. Wang Speaker: Y. Fu
	D-14 Modeling nozzle geometry changes due to the ablation in high-voltage circuit breakers S. Arabi, J. Y. Trepanier, R. Camarero, A. Vassilev Speaker: J. Y. Trepanier	C-10 Vacuum pulse breakdown ignition in a gap with high-current-density cathode A. Taran, O. Kyslytsyn, A. Okhrimovskyy, D. Oranska Speaker: A. Taran
	D-15 Optical emission characteristics of guided streamers generated in helium and argon mixtures with N ₂ and O ₂ K. Gazeli, P. Svarnas, F. Clément Speaker: F. Clément	C-11 Breakdown characteristics of plasma closing switches filled with different gases C. Mcgarvey, I. Timoshkin, S. Macgregor, M. Wilson, M. Given, M. Sinclair Speaker: C. Mcgarvey
12:30-14:00	Lunch RU Forum	
14:00-19:00	Social Event	
20:00-22:30	International Scientific Committee Dinner	

Thursday, 10th July 2014

09:00-09:45	Invited Lecture (Cabannes Lecture Hall) Cabannes Lecture Hall K.-D. Weltmann, T. Gerling, H. Höft, T. Hoder, A. Pipa, A. V. Nastuta, R. Brandenburg, R. Bussiahn and M. Kettlitz (Germany) <i>Advanced electrical and optical diagnostics on atmospheric pressure plasmas with focus on microdischarges</i> Chair: M. Seeger	
09:45-10:00	Tea & Coffee Break	
10:00-12:30	<i>Cabannes Lecture Hall</i> A6 - Arcs Chair: P. Robin-Jouan, A. Gleizes	<i>Blaise Lecture Hall</i> E1 - Low Pressure Plasmas and Applications Chair: P. Brault, M. Mikikian
	A-39 Quenching performance of Air arc discharge Y. Okano, Y. Goto, E. Kaneko, M. Fuchikami Speaker: Y. Okano	E-1 Complex plasmoid behaviors in dusty plasma experiments M. Mikikian, H. Tawidian, T. Lecas Speaker: M. Mikikian
	A-40 Radiative properties in high voltage circuit breakers arc plasma: validity of mixture laws for SF ₆ /C ₂ F ₄ mixtures and impact of copper on net emission coefficients L. Hermette, Y. Cressault, A. Gleizes, C. Jan, K. Bousoltane Speaker: Y. Cressault	E-2 Diagnostics of oxygen low-pressure RF plasma suitable for treatment of sensitive surfaces N. Skoro, K. Spasic, N. Puac, G. Malovic, Z. Petrovic Speaker: N. Skoro

A-41	Research on the breaking characteristics of non-equilibrium arc with small current for SF6 high voltage circuit breaker Y. Xia, Z. Li, J. Zhong, X. Lin, J. Xu Speaker: Y. Xia	E-3	Electron swarm parameters in binary gas mixtures of CF3I with Xe, He, N2 and CO2 from Boltzmann equation analysis Y. Deng, D. Xiao, J. Jiang, S. Qin, L. Zhu Speaker: Y. Deng
A-42	Simulation analysis of the electrode-arc interaction in free-burning arcs M. Baeva, S. Gorchakov, D. Uhrlandt, K. D. Weltmann Speaker: M. Baeva	E-4	Electrostatic probe and laser photodetachment measurements in the hydrogen negative ion (H-) source "Prometheus I" S. Aleiferis, P. Svarnas, I. Tsiroidis, S. Béchu, A. Lacoste, M. Bacal Speaker: S. Aleiferis
A-43	Spallation occurrence control by mixing phthalate esters in polyamide material for polymer ablation assisted circuit breakers T. Nakano, Y. Tanaka, Y. Uesugi, T. Ishijima, Y. Goto, H. Horibe Speaker: T. Nakano	E-5	Glow discharge spectrometries for ultra fast depth profile characterization of materials P. Chapon, S. Legendre, A. Tempez, C. Olivero Speaker: P. Chapon
A-44	Spectroscopic observation of diatomic molecules in plasmas generated by non-transferred electric arcs A. Maslani, V. Sember Speaker: A. Maslani	E-6	Modification of the shock wave shape of a supersonic low Reynolds number flow field around a cylinder by a glow discharge in air R. Jousset, V. Lago, J. D. Parisse Speaker: R. Jousset
A-45	Spectroscopic study and high speed imaging of a transient arc P. Ratovoson, F. Valensi, M. Razafinimanana Speaker: F. Valensi	E-7	O atoms density measurements in a capillary nanosecond discharge: measurement techniques and kinetic modeling A. Klochko, N. Popov, A. Salmon, J. P. Booth, S. Starikovskaia Speaker: A. Klochko
A-46	Spectroscopic study of the transition stage in fuse wire A. Coulbois, P. André, W. Bussière, J. L. Gelet, D. Rochette Speaker: A. Coulbois	E-8	Oscillating movement in N2/CH4 dusty RF plasmas J. F. Lagrange, I. Géraud-Grenier, F. Faubert, V. Massereau-Guilbaud Speaker: J. F. Lagrange
A-47	Study on critical breakdown electric field strength of different SF6-N2 and SF6-CF4 mixtures at gas temperatures up to 3000 K H. Zhao, X. Li, A. B. Murphy, S. Jia Speaker: X. Li	E-9	Study of dual frequency RF and RF/DC plasma discharges used for surface treatment S. Stepanov, A. Shishkin Speaker: S. Stepanov
A-48	Arc fault in enclosure volumes: CFD simulations and experimental tests on representative simple geometries P. Pontelandolfo, D. Greco, L. Felberbaum, G. Thwapih, R. Putzu Speaker: R. Putzu	E-10	The effect of an obstacle in the ablation plasma on the electrical properties of the oxide thin films F. Gherendi, M. Nistor, N. Mandache Speaker: F. Gherendi
A-49	Two-dimensional electron density imaging for SF6 arc interruption phenomenon using Shack-Hartmann type laser wavefront sensor Y. Inada, T. Kamiya, S. Matsuoka, A. Kumada, H. Ikeda, K. Hidaka Speaker: Y. Inada	E-11	The snapshot of nanosecond development of high power microwave vacuum window breakdown C. Chang, M. Zhu, C. H. Chen, M. N. Guo, J. C. Peng, S. Li, Z. F. Xiong Speaker: C. Chang

12:30-14:00 **Lunch**
RU Forum

14:00-14:45	Invited Lecture (<i>Cabannes Lecture Hall</i>) K. Satoh and H. Itoh (Japan) <i>Decomposition of pollutants in water by pulsed-discharge plasma and the clarification of the decomposition process</i> Chair: S. Starikoskaia	
14:45-14:55	Break	
14:55-16:30	<i>Cabannes Lecture Hall</i> M1 - Measurement Techniques Chair: A. Haddad M-1 Designing a high resolution microcontroller-based electrostatic probe system for plasma characterization S. Aleiferis, P. Svarnas Speaker: S. Aleiferis M-2 Determination of absolute atomic hydrogen densities by Two-Photon Absorption Laser Induced Fluorescence in a H ₂ /CH ₄ microwave plasma at high pressure and high microwave power M. Wartel, C. Duluard, X. Aubert, C. Rond, A. Gicquel Speaker: C. Duluard M-3 Determination of electric conductivity of hot argon gas using a high-frequency high-voltage generator C. Leu, M. Birle, S. Gossel, F. Reichert Speaker: C. Leu M-4 Distribution voltage of insulators measuring using tungsten needle electrodes M. Zhu, C. Zhao, H. Mei, Z. Guan, L. Wang Speaker: M. Zhu M-5 Electron temperature and density measurements in GTAW and GMAW processes by thomson scattering M. Kühn-Kauffeldt, J. L. Marquès, J. Schein Speaker: M. Kühn-Kauffeldt M-6 Experimental study of an electrical discharge at atmospheric pressure S. Chuon, N. Cerqueira Speaker: N. Cerqueira M-7 Experimental study on leader characteristics in atmospheric air using a Mach-Zehnder interferometer X. Zhou, R. Zeng, S. Chen Speaker: X. Zhou	<i>Blaise Lecture Hall</i> E2 - Low Pressure Plasmas and Applications G - Pulsed-Power Application H - Light Sources Chair: Z. Petrovic E-12 Time resolved study of the HiPIMS post-discharge S. Cuynet, M. Palmucci, A. Caillard, T. Lecas, A. L. Thomann, P. Brault, J. Bigarré, P. Buvat Speaker: S. Cuynet E-13 Two-temperature chemical-nonequilibrium modelling of the plasma flow in a low-power hydrogen arcjet thruster W. P. Sun, H. X. Wang Speaker: W. P. Sun E-14 Using plasma simulation as a smart controller of microwave discharge devices for material processing Y. Yasaka, R. Taniguchi, K. Kobayashi Speaker: Y. Yasaka E-15 Xe-Ar and Ar plasma discharges in a small Hall effect thruster: electric and optic diagnostic F. Diop, T. Gibert, A. Bouchoule Speaker: F. Diop H-1 Ne-like Ar soft X-ray laser pumped by capillary discharge with different current pulses Y. Zhao, Y. Ding, H. Cui, S. Jiang, T. Liu, Q. Wang Speaker: Y. Zhao G-1 Plasma volume and energy influences on the combustion efficiency using a new spark-plug D. Astanei, F. Faubert, S. Pellerin, B. Hnatiuc, E. Hnatiuc, N. Cerqueira Speaker: D. Astanei G-2 Performance of plasma closing switches filled with air, nitrogen and a nitrogen/oxygen mixture M. Hogg, I. Timoshkin, S. Macgregor, M. Given, M. Wilson, T. Wang Speaker: M. Hogg
16:30-16:45	Tea & Coffee Break	

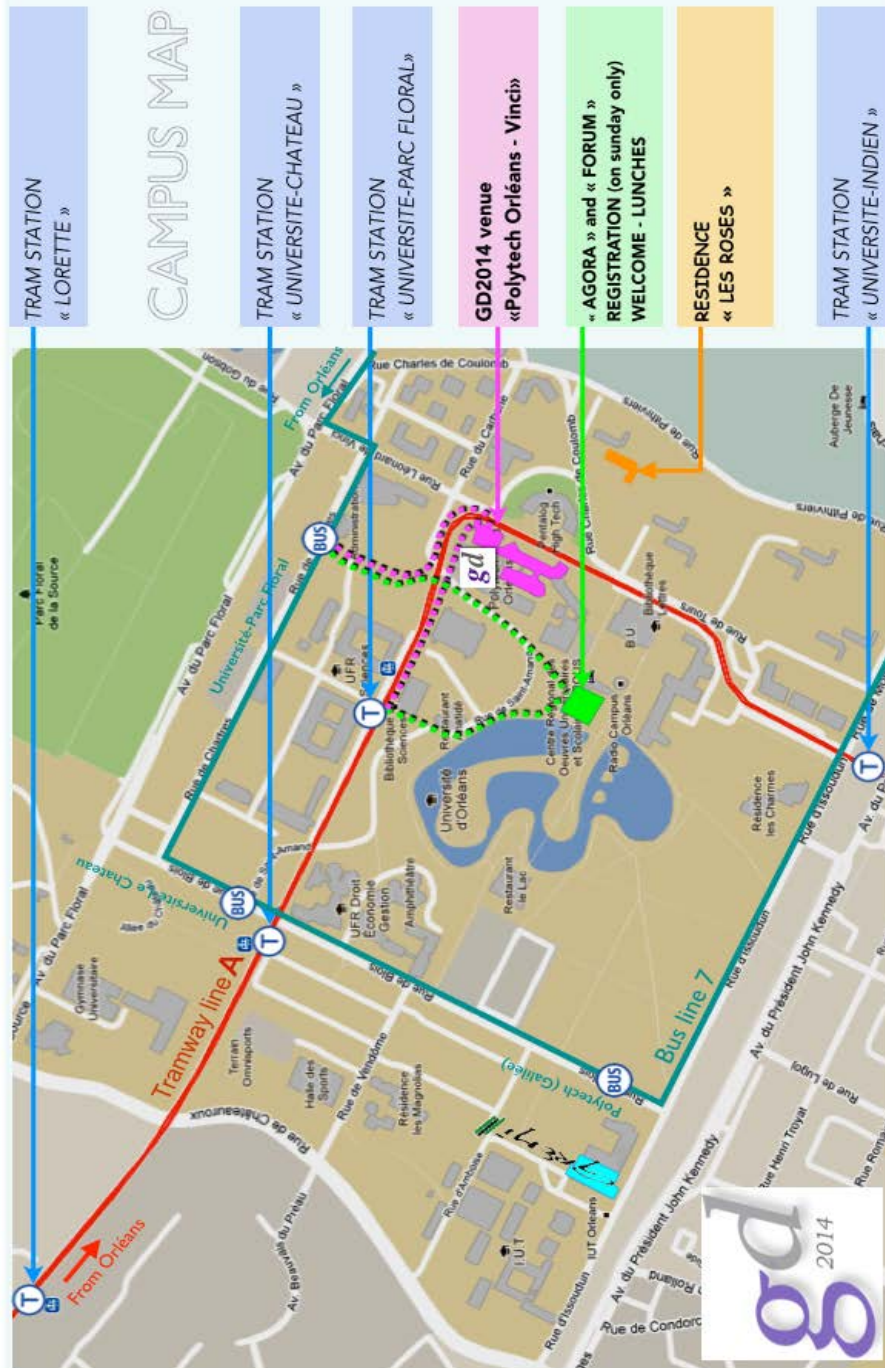
16:45-18:05	<i>Cabannes Lecture Hall</i> J1 - Test Techniques and DiagnosticsM2 - Measurement Techniques L - Emerging and Topical Applications of Gas Discharges Chair: S. Leonov	<i>Blaise Lecture Hall</i> D3 - High Pressure Plasmas and Applications Chair: K.-D. Weltmann
	M-8 Using an emissive probe to measure time-averaged plasma potential in a Hall thruster discharge A. Petin, J. Vaudolon, S. Mazouffre, P. Kudrna, M. Tichý Speaker: A. Petin	D-16 Plasma-aided gasification of biomass P. Escot Bocanegra, J. M. Cormier Speaker: P. Escot Bocanegra
	L-1 Ignition in ethanol-containing mixtures after high-voltage nanosecond discharge N. Aleksandrov, I. Kosarev, S. Kindysheva, A. Starikovskii Speaker: I. Kosarev	D-17 Reactive species delivery in atmospheric He+O2 cold plasma A. Yang, D. Liu, X. Wang, M. Rong Speaker: A. Yang
	L-2 Ignition of combustible mixtures by nanosecond surface dielectric barrier discharge E. Anokhin, S. Kindysheva, D. Kuzmenko, I. Kosarev, V. Soloviev, N. Aleksandrov Speaker: I. Kosarev	D-18 Study on premixed combustion enhancement with dielectric barrier discharge L. Yu, H. Mu, P. Li, S. Zhao, C. Tang, G. Zhang, J. Wang Speaker: L. Yu
	L-3 Production of ammonia in a packed-bed dielectric barrier discharge J. Hong, S. Praver, A. B. Murphy Speaker: A. B. Murphy	D-19 Time-resolved mass spectrometry of positive ions and ICCD imaging of atmospheric pressure plasma jet N. Selakovic, N. Puac, G. Malovic, Z. L. Petrovic Speaker: Z. L. Petrovic
	L-4 Synthesis of (B-C-N) nanomaterials by arc discharge D. E. Gourari, M. Razafinimanana, M. Monthieux, R. Arenal, F. Valensi, S. Joulié, V. Serin Speaker: F. Valensi	D-20 Visualization of nanosecond surface dielectric barrier discharge at high pressures S. Stepanyan, N. Popov, S. Starikovskaia Speaker: S. Stepanyan
	J-1 Analysis of partial discharge signals with higher dimension chromaticity A. Al-Temeemy, G. Jones, M. Ragaa, C. Nyamupangedengu, A. Deakin, J. Spencer Speaker: G. Jones	
18:10-19:00	ISC Meeting <i>Room P001</i>	
19:15-00:00	Conference Banquet	

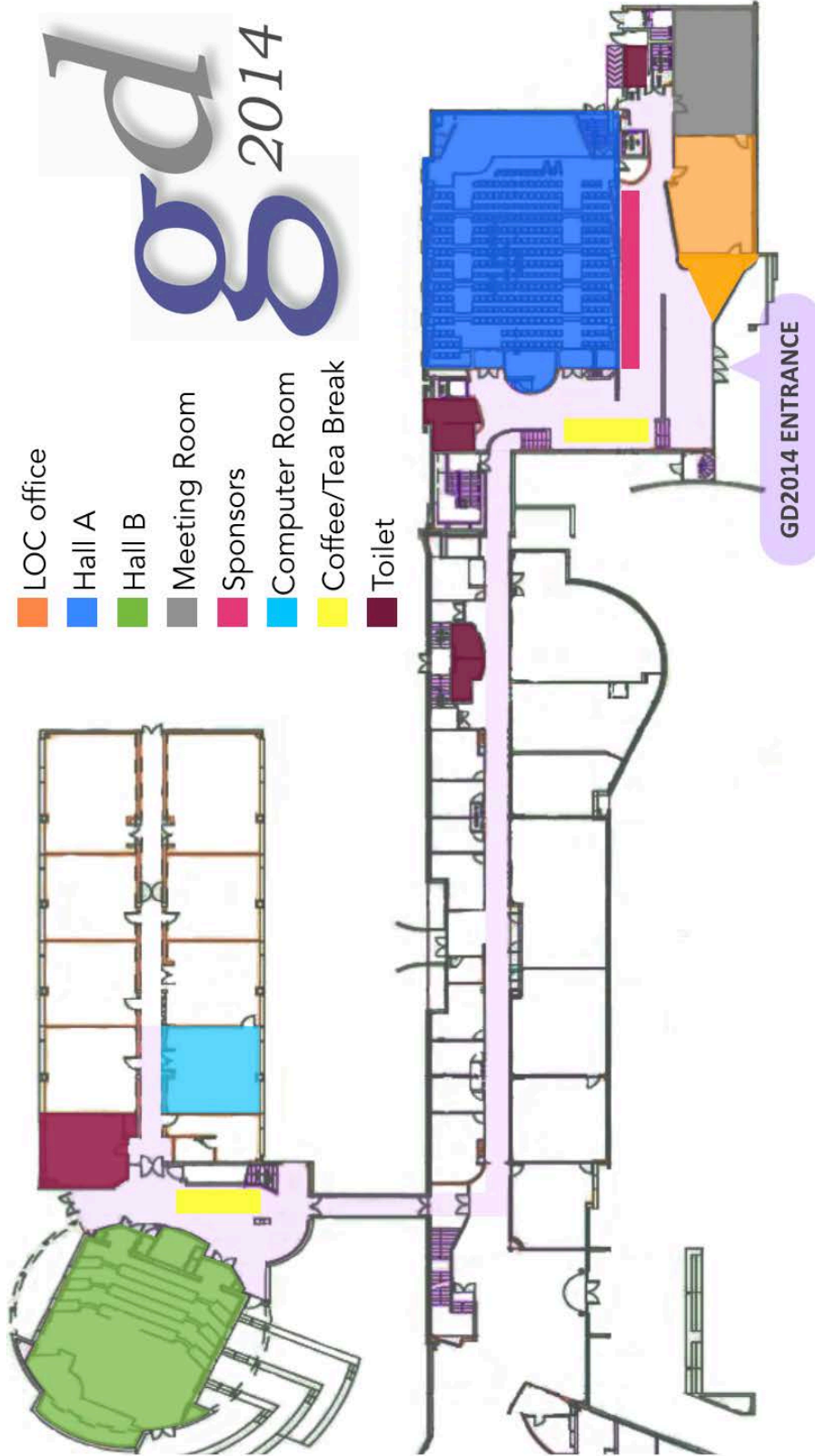
Friday, 11th July 2014

09:00-09:45	Invited Lecture (<i>Cabannes Lecture Hall</i>) J. de Urquijo (Mexico) <i>Derivation/validation of collision cross sections for ions and electrons in gases from measured swarm coefficients</i> Chair: C.M. Franck
09:45-10:00	Tea & Coffee Break

10:00-12:30	<i>Cabannes Lecture Hall</i>	<i>Blaise Lecture Hall</i>
	I - Lightning J2 - Test Techniques and Diagnostics Chair: J. Schein, J. E. Jones	K - Fundamental Processes and Cross-Sections Chair: C. M. Franck, J. De Urquijo
	I-1 Gas dynamical model of linear lightning discharge A. Anikyevev, V. Pustovoit, O. Kravchenko Speaker: O. Kravchenko	K-1 An argon collisional-radiative model application to hollow-cathode S. R. Sun, H. X. Wang Speaker: S. R. Sun
	I-2 Investigation of charged gas instability in 2D model of lightning discharge O. Kravchenko, V. Pustovoit Speaker: O. Kravchenko	K-2 Analysis of insulating characteristics of SF6 and CF3I from the point of view of microscopic features J. Jiao, Y. Deng, D. Xiao, J. Jiang, S. Qin Speaker: Y. Deng
	I-3 Study of a high current arc used for direct lightning effect characterization C. Zaepffel, R. Sousa Martins, L. Chemartin, P. Lalande Speaker: C. Zaepffel	K-3 Basic data of Ar+ and Ar2+ ions in argon gas needed to optimize low temperature plasma jets for biomedical uses A. Chicheportiche, F. X. Gadea, M. Benhenni, B. Lepetit, M. Yousfi, R. Kalus Speaker: A. Chicheportiche
	J-2 Design of a simplified ion-flux probe for plasmas free of insulating deposits V. D. Karaventzas, P. Svarnas Speaker: V. D. Karaventzas	K-4 Calculation of electron swarm parameters of c-C4F8/N2 mixtures using an improved Monte Carlo collision simulation method Y. Lou, D. Xiao, S. Qin, J. Jiang Speaker: S. Qin
	J-3 Electric spark discharge in air characterization by following electrodes erosion S. Bernard, S. Pellerin, P. Gillard, D. Astaneï Speaker: S. Pellerin	K-5 Discharge effect on the chemical kinetics of negative temperature coefficient in propane-air mixture E. Filimonova, V. Biturina Speaker: E. Filimonova
	J-4 Electrical discharges on the condensable hydrocarbons under the influence of DC voltage: an experimental approach S. Arumugam, P. Schröder, Y. Neubauer, S. Gorchakov, K. D. Weltmann, T. Schoenemann Speaker: S. Arumugam	K-6 Effect of secondary electron emission coefficient on Townsend's second ionization coefficient T. Yoshinaga, H. Akashi Speaker: H. Akashi
	J-5 Integrated modeling environment "Virtual Discharge" for gas discharge study S. Stepanov, A. Shishkin Speaker: S. Stepanov	K-7 Electron drift, diffusion, and effective ionization coefficients in SF6-CHF3 and SF6-CF4 mixtures from Boltzmann analysis L. Wei, D. Yuan, Y. Zhang, Z. H. Tan, G. Dong Speaker: L. Wei
	J-6 Investigations on the interaction between switching arc and quenching gas in insulating nozzles by optical measurements P. G. Nikolic, A. Mühlbeier, P. Stoller, A. Schnettler Speaker: P. G. Nikolic	K-8 Formation of vibrational distribution function of electronically-excited N2(A3S) molecules in nitrogen discharge plasma N. Popov Speaker: N. Popov
	J-7 Propagation characteristics of PD-induced UHF signal in GIS with three-phase construction T. Li, M. Rong, D. Liu, X. Wang Speaker: X. Wang	K-9 PIC-MC simulations for microplasma propagation in parallel multi cavity arrangements at atmospheric pressure conditions M. Hilbert, M. Siemers, A. Pflug, M. Kurrat Speaker: M. Hilbert

	<p>J-8 Quantitative determination of density of ground state atomic oxygen from both TALIF and emission spectroscopy in hot air plasma generated by microwave resonant cavity F. Marchal, M. Yousfi, N. Merbahi, G. Wattieaux, A. Piquemal Speaker: G. Wattieaux</p>	<p>K-10 Swarm parameter measurements of c-C₄F₈O in buffer gases D. A. Dahl, M. Rabie, P. Häfliger, C. M. Franck Speaker: C. M. Franck</p>
	<p>J-9 Spatial characterization of a Capacitively Coupled Plasma in argon at low pressure with double Langmuir probe and Optical Emission Spectroscopy diagnostics C. Laurent, J. Lo, B. Caillier, L. Therese, P. Guillot Speaker: C. Laurent</p>	<p>K-11 Two-temperature plasma properties of ablated PTFE vapour used for pulsed plasma thrusters W. Wang, M. Li, X. Tu Speaker: W. Wang</p>
<p>12:30-12:45</p>	<p>Closing Ceremony <i>Cabannes Lecture Hall</i></p>	
<p>12:45-14:00</p>	<p>Lunch RU Forum</p>	







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