



**2<sup>nd</sup> Circular for the ISSI – Europlanet Workshop on  
Planetary Atmospheric Electricity  
Date 23 – 27 July 2007 in Bern, ISSI, Switzerland**

**Conveners and Space Science Series Volume Editors**

Lebreton J.P., ESTEC/ESA

Aplin K., Rutherford Appleton Laboratory

Pulinets S., IZMIRAN/Russia

Parrot M., LPCE/France

Kamogawa M. Tokyo Gakugei University

Harrison R.G., The University of Reading/UK

Klos Z., Polish Academy of Sciences

Leblanc F., Service d'Aéronomie/IPSL

Treumann R., University of Munich

Blanc M., ISSI

Yair Y., The Open University of Israel

[jean-pierre.lebreton@esa.int](mailto:jean-pierre.lebreton@esa.int)

[k.l.aplin@rl.ac.uk](mailto:k.l.aplin@rl.ac.uk)

[pulse@geofisica.unam.mx](mailto:pulse@geofisica.unam.mx)

[mparrot@cns-orleans.fr](mailto:mparrot@cns-orleans.fr)

[kamogawa@u-gakugei.ac.jp](mailto:kamogawa@u-gakugei.ac.jp)

[r.g.harrison@reading.ac.uk](mailto:r.g.harrison@reading.ac.uk)

[klos@cbk.waw.pl](mailto:klos@cbk.waw.pl)

[francois.leblanc@aerov.jussieu.fr](mailto:francois.leblanc@aerov.jussieu.fr)

[treumann@issibern.ch](mailto:treumann@issibern.ch)

[michel.blanc@issibern.ch](mailto:michel.blanc@issibern.ch)

[yoavya@openu.ac.il](mailto:yoavya@openu.ac.il)

**Contact at ISSI:**

Questions regarding hotel, travel, directions to ISSI, etc.: Ms. Brigitte Fasler, Secretary,  
[fasler@issibern.ch](mailto:fasler@issibern.ch), +41 31 631 48 96

Questions regarding computer & A/V issues: Mr. Saliba Saliba, System Administrator,  
[saliba@issibern.ch](mailto:saliba@issibern.ch), +41 31 631 32 51

Please note that this circular is on the workshop webpage located under “Workshop Schedule” on the ISSI home page (<http://www.issibern.ch>) or directly at <http://www.issibern.ch/workshops/Electricity/>.

## 1. General information

The International Space Science Institute (ISSI) is hosting a workshop on Planetary Atmospheric Electricity. The attendance at this workshop is by invitation only. Invited participants have already confirmed their attendance and contribution to the Workshop. The aim of this Second Circular is to provide the participants with more detailed information on the workshop programme, organisation and logistics, and to enquire about hotel reservation information.

## 2. Workshop objectives

The objective of this joint ISSI-Europlanet project is to discuss our present understanding of atmospheric electricity at Earth and on the other planets of our solar system. Both the workshop, which will constitute the first step of the project development, and the book, which will represent its final product, will describe and discuss the different elements of this theme. Each book chapter will correspond to the sessions, and the sessions chairs will serve as lead authors. Other workshop participants and experts not present at the workshop are encouraged to contribute as co-authors. For more information about ISSI itself, please see the ISSI website at [www.issibern.ch](http://www.issibern.ch).

## 3. Programme of the workshop

Day	Session	Chairpersons
Monday 23 July 2007	Introduction	J.P. Lebreton
Monday 23 July 2007	The Global Electric Circuit	K. Aplin/ M. Rycroft
Tuesday 24 July 2007	Ionisation Processes in Planetary Atmospheres	G. Harrison / H. Tammet
Wednesday 25 July 2007	Hazards and Measurements Related to Lightning	J.-P. Lebreton / J.-J. Berthelier
Thursday 26 July 2007	Charging formation	Yoav Yair
Friday 27 July 2007	Physics of discharges	R. Treumann, Z. Klos, M. Parrot

## 4. List of Participants

Aplin K., Space Science and Technology, UK	<a href="mailto:k.l.aplin@rl.ac.uk">k.l.aplin@rl.ac.uk</a>
Arnold F., Atmospheric Physics Division, Max-Planck-Institute for Nuclear Physics, Germany	<a href="mailto:frank.arnold@mpi-hd.mpg.de">frank.arnold@mpi-hd.mpg.de</a>
Bazilevskaya G. Lebedev Institute, Russia,	<a href="mailto:gbaz@rambler.ru">gbaz@rambler.ru</a>
Berthelier J.J., CETP, France	<a href="mailto:jean-jacques.berthelier@cetp.ipsl.fr">jean-jacques.berthelier@cetp.ipsl.fr</a>
Blanc E., CEA/DAM,	<a href="mailto:elisabeth.blanc@cea.fr">elisabeth.blanc@cea.fr</a>
Blanc M., ISSI, France	<a href="mailto:michel.blanc@cesr.fr">michel.blanc@cesr.fr</a>
Bösinger T., Univ. Oulu, Finland	<a href="mailto:til.bos@hotmail.com">til.bos@hotmail.com</a>
Desch S., Arizona State University, USA,	<a href="mailto:Steven.Desch@asu.edu">Steven.Desch@asu.edu</a>
Fischer G., University of Iowa, USA,	<a href="mailto:georg-fischer@uiowa.edu">georg-fischer@uiowa.edu</a>
Graps A. CNR, Italy	<a href="mailto:amara.graps@ifsi-roma.inaf.it">amara.graps@ifsi-roma.inaf.it</a>
Harrison R.G., The University of Reading, UK	<a href="mailto:r.g.harrison@reading.ac.uk">r.g.harrison@reading.ac.uk</a>
Kamogawa M. Tokyo Gakugei University, Japan	<a href="mailto:kamogawa@u-gakugei.ac.jp">kamogawa@u-gakugei.ac.jp</a>
Kawasaki Z.-I., Department of Electrical, Electronic and Information Engineering, Osaka University, Japan,	<a href="mailto:zen@comm.eng.osaka-u.ac.jp">zen@comm.eng.osaka-u.ac.jp</a>
Klos Z., Polish Academy of Sciences, Poland	<a href="mailto:klos@cbk.waw.pl">klos@cbk.waw.pl</a>
Jones G., Mullard Space Science Laboratory, UK	<a href="mailto:ghj@mssl.ucl.ac.uk">ghj@mssl.ucl.ac.uk</a>
James M., U. of Lancaster, UK	<a href="mailto:m.james@lancaster.ac.uk">m.james@lancaster.ac.uk</a>

Kazil J., National Oceanic & Atmospheric Administration, USA,	<a href="mailto:jan.kazil@noaa.gov">jan.kazil@noaa.gov</a>
Leblanc F., Service d' Aéronomie/IPSL, France	<a href="mailto:francois.leblanc@aerov.jussieu.fr">francois.leblanc@aerov.jussieu.fr</a>
Lebreton J.P., ESTEC/ESA, The Netherlands	<a href="mailto:jean-pierre.lebreton@rssd.esa.int">jean-pierre.lebreton@rssd.esa.int</a>
Lefeuvre F., LPCE/France,	<a href="mailto:flefeuvre@cnsr-orleans.fr">flefeuvre@cnsr-orleans.fr</a>
Lorenz R. D. Space Department, Johns Hopkins University USA,	<a href="mailto:ralph.lorenz@jhuapl.edu">ralph.lorenz@jhuapl.edu</a>
Mareev E., U. of Nizhny-Novogord, Russia	<a href="mailto:mareev@appl.sci-nnov.ru">mareev@appl.sci-nnov.ru</a>
Marshall T., University of Mississippi, USA	<a href="mailto:marshall@olemiss.edu">marshall@olemiss.edu</a>
Mika, A. Crete University, Greece	<a href="mailto:agnes@cc10.physics.uoc.gr">agnes@cc10.physics.uoc.gr</a>
Mishin, E. AFGL, USA	<a href="mailto:Evgenii.Mishin.ctr@hanscom.af.mil">Evgenii.Mishin.ctr@hanscom.af.mil</a>
Molina-Cuberos G. J. Universidad de Murcia , SPAIN	<a href="mailto:gregomc@um.es">gregomc@um.es</a>
Parrot M., LPCE, France	<a href="mailto:mparrot@cnsr-orleans.fr">mparrot@cnsr-orleans.fr</a>
Pulinets S., IZMIRAN, Russia	<a href="mailto:pulse@geofisica.unam.mx">pulse@geofisica.unam.mx</a>
Renno N., U. of Michigan, USA,	<a href="mailto:nrenno@umich.edu">nrenno@umich.edu</a>
Roussel-Dupre R., LANL, USA	<a href="mailto:rroussel-dupre@lanl.gov">rroussel-dupre@lanl.gov</a>
Rycroft M., Caesar Consultancy, UK,	<a href="mailto:michaelrycroft@btinternet.com">michaelrycroft@btinternet.com</a>
Saunders C., U. Manchester, UK,	<a href="mailto:clive.saunders@manchester.ac.uk">clive.saunders@manchester.ac.uk</a>
Shalimov S., Inst.Phys.Globe, Russia	<a href="mailto:shalimov@ifz.ru">shalimov@ifz.ru</a>
Simoes F., CETP, France	<a href="mailto:fernando.simoes@cetp.ipsl.fr">fernando.simoes@cetp.ipsl.fr</a>
Stoltzenburg M., U. of Mississippi, USA	<a href="mailto:mstolzen@phy.olemiss.edu">mstolzen@phy.olemiss.edu</a>
Takahashi Y., Dept. Geophysics, Tohoku University, Japan	<a href="mailto:yukihiro@pat.geophys.tohoku.ac.jp">yukihiro@pat.geophys.tohoku.ac.jp</a>
Tammet H., Institute of Environmental Physics, Estonia	<a href="mailto:Hannes.Tammet@ut.ee">Hannes.Tammet@ut.ee</a>
Treumann R., University of Munich, Germany	<a href="mailto:treumann@issibern.ch">treumann@issibern.ch</a>
Tripathi S. N., Department of Civil Engineering, Indian Institute of Technology, India,	<a href="mailto:snt@iitk.ac.in">snt@iitk.ac.in</a>
Usoskin I., Oulu Cosmic Ray Station, Finland,	<a href="mailto:ilya.usoskin@oulu.fi">ilya.usoskin@oulu.fi</a>
Uyeshima M., Earthquake Research Institute, University of Tokyo, Japan,	<a href="mailto:uyeshima@eri.u-tokyo.ac.jp">uyeshima@eri.u-tokyo.ac.jp</a>
Yair Y., The Open University of Israel, Israel	<a href="mailto:yoavya@openu.ac.il">yoavya@openu.ac.il</a>
Zarka P., Observatoire de Paris Meudon, France	<a href="mailto:philippe.zarka@obspm.fr">philippe.zarka@obspm.fr</a>

## 5. Workshop program

The detailed workshop program is available on the workshop website.

There will be the possibility at the end of each session to add few short presentations if any participant wish to discuss a specific point. However, in order to prepare as well as possible the workshop, it is asked to speaker who would like to do so, to contact the chairpersons of the session before end of June.

Each participant is also asked to provide a short CV or a personal web address that will be put on the workshop web site before end of June.

## 6. Publication

A workshop volume is planned to be published by Springer both as a hardcover book in the Space Sciences Series of ISSI (SSSI) and as an issue of the journal Space Science Reviews (SSRv). It is expected that each talk given during this workshop will be followed by the writing of a paper, submitted to the usual refereeing process. Further details about the publication (including LaTeX style files) will be given at the workshop.

## 7. Funding of the workshop

ISSI will fund the participants by providing the daily subsistence cost during the time of the meeting up to a maximum of 7 days (time of arrival in Bern through departure from Bern).

This includes the cost for the hotel and for meals. However, ISSI is not in a position to cover travel costs, taxis, phone calls etc. There will be no registration fee for this workshop. ISSI and Europlanet will also cover the publication costs of the printed volume, of which each participant will receive a free copy.

## **9. Equipment available at ISSI**

ISSI is equipped with a pool of different kinds of workstations such as PCs, Macs, and Sun Stations, as well as with Postscript printers for both b/w and colour. All machines have Ethernet connections and run web browsers, ssh, telnet, ftp, etc., so connecting home, accessing email, printing, etc. while at ISSI will be no problem.

Participants who bring their own notebook computers will be able to connect to the Ethernet through the standard RJ45 plug. Cables are available at ISSI and addresses will be dealt out by our DHCP server. We also provide wireless access; participants wishing to use that will receive a username/password combination from our computer engineer and system administrator, Saliba F. Saliba ([saliba@issibern.ch](mailto:saliba@issibern.ch)), who will also help with any computer-related questions.

The seminar room is equipped with a computer and beamer for electronic presentations, a video player, two overhead projectors, a slide projector, and a whiteboard.

## **10. Social program**

An informal welcome drink will be offered at the end of the first day at ISSI, on Monday, 23 July 2007 at 6.30 p.m. A free afternoon is foreseen on Wednesday, 25 July 2007. A workshop dinner will be organized on the evening of Thursday, 26 July 2007, at 7:00 p.m., in a restaurant located in the old part of the city.

## **11. Travelling to Bern**

Bern can be reached easily from two international airports: Zurich (ZRH) and Geneva (GVA). Direct intercity trains to Bern depart every half hour from inside the airport buildings; see [www.rail.ch](http://www.rail.ch) for detailed departure times. The travel time is ~1.5 hours from Zurich airport and ~2 hours from Geneva airport.

There is also a local airport (Bern, BRN), located a 20 minute shuttle ride from the city centre, with connections to several European cities (London, Munich, etc.). Bern is connected to many European cities by fast intercity trains (e.g. TGV Paris-Bern in 4.5 hours, or Frankfurt-Bern 5 hours). Timetable information of trains within and around Switzerland can be found at [www.rail.ch](http://www.rail.ch). Also check out [www.issibern.ch/guide.html](http://www.issibern.ch/guide.html) for a few more travel tips such as links to city maps of Bern, weather forecasts, currency calculators, etc...

## **12. Hotel reservations**

All participants at the workshop are now requested to contact the workshop secretary, Brigitte Fasler (Tel. +41-31-631-4896, Fax: +41-31-631-4897, email: [fasler@issi.unibe.ch](mailto:fasler@issi.unibe.ch)), to indicate their arrival and departure dates and times, as well as any special requests they may have (e.g. double room). A confirmation will be returned within a few days. Block bookings have been made in nearby hotels; please see [http://www.issibern.ch/hotel\\_info.html](http://www.issibern.ch/hotel_info.html) for a map indicating the location of the hotels and of ISSI.

## **13. Timeline and deadlines**

Hotel reservation information to Brigitte Fasler: 15 June 2007