

Bern, July 18, 2017

ISSI Workshop on Comets: Post 67P perspectives in Bern, Switzerland, on 15 to 19 January 2018

Dear colleague,

We should like to invite you to give a talk and to play an active role in a workshop on "Comets: Post 67P perspectives", which is organised and sponsored by the International Space Science Institute (ISSI) in Bern, Switzerland. The WS will be held on 15 to 19 January 2018. For information about ISSI please refer to our homepage at http://www.issibern.ch.

The aims of the workshop will be

- 1. To review the progress made on multi-instrument data analysis after Rosetta Mission. This shall include
 - a) Current status of the development of an integrated 3D shape model.
 - b) Current status of the mapping of properties/measurements to surface facets of the 3D model,
 - c) Current status and results from gas dynamics modelling including activity distributions using multiple data sets,
 - d) Current status of dust emission and brightness modelling,
 - e) Current status of analysis of surface physical structure and thermal balance,
 - f) Current understanding of the coma and surface chemical composition,
 - g) Placing the results in the context of other observations of comets
 - 2. To assess and possibly revise current models of nucleus activity (including potential evidence for different mechanisms) and evolution.
 - To assess our current understanding of risk from comets (through perturbation of nuclei by non-gravitational forces and particle impact on interplanetary spacecraft) including link to ground-based observations.
 - 4. To re-assess the (extensive) study work performed on possible comet nucleus sample return studies and provide guidelines as to how this work should be updated in the light of Rosetta's results.

With the participation of the leading experts in the field, the workshop will make it possible to revisit all aspects related to this subject, and will

investigate the question of possible long-term improvements in the relevant technologies.

The conveners for the workshop are: Nicolas Thomas (University of Bern), Bjorn Davidsson (Jet Propulsion Laboratory), Laurent Jorda (Laboratoire d'Astrophysique de Marseille, France), Ekkehard Kuehrt (DLR, Institut für Planetenforschung), Colin Snodgrass (The Open University, UK) and Raphael Marschall, Rafael Rodrigo, and John Zarnecki from ISSI.

Participation in this Workshop is by invitation only. The convenors have endeavoured to create a list of participants who are currently very active in this field and who will cover the relevant topics without making the workshop unwieldy. A significant number of invitees, just as you, have already been approached informally by the Convenors and have accepted to make an oral contribution at the Workshop.

A draft programme for the Workshop has been issued and is attached to this letter. The topic on which you have been asked to speak was indicated only by a short phrase. In order to finalise the programme, we would be grateful if you could send us a proposed, more expressive title for your talk. You can assume that your talk will be scheduled for 25 minutes, with an additional 5 minutes for questions.

ISSI will cover your subsistence costs (hotel and meals) while in Bern. However, we are not in a position to cover your travel costs. There is no registration charge for participating in the Workshop.

An important outcome of the workshop will be a book published in the Space Sciences Series of ISSI (SSSI) by Springer Verlag http://www.issibern.ch/publications). This volume is not intended to be the proceedings of the Workshop, but a collection of in-depth papers informed by the contributions and discussions at the Workshop. It should provide a coherent picture of the current state of the subject. All papers will be peer reviewed. The papers will be published both in the hardcover book in this series and also individually in Space Science Reviews as they are received. We expect the papers will be submitted within 5-6 months of the workshop so they can reflect the discussions during it. The journal issue and the SSSI volume are expected to appear about 12-15 months after the workshop (early 2019). By accepting this invitation, you also accept to contribute to the ISSI volume.

The production of the book is the main aim of this activity. The workshop is designed to assemble the authors and other experts in the field for discussion of the relevant issues. Normally, there are up to 15-20 papers divided into about 5 sections, with an expected paper length of around 20 pages. Attendance at the workshop will not exceed 40 - 45, including a number of young researchers in addition to established experts in the field. Substantial presentations followed by ample discussion time are envisaged.

We hope very much that you will be able to attend this workshop. Rafael Rodrigo and Raphael Marschall (r.rodrigo@issibern.ch, raphael.marschall@issibern.ch), will be responsible for organising the behalf and Alexandra workshop of ISSI, Lehmann on (alexandra.lehmann@issibern.ch) will deal with all matters such as hotel reservations, reimbursements, etc. We will contact you again with a Second Circular giving more detailed information about the Workshop and the accommodation in Bern and will be requesting you to inform Alexandra Lehmann of your arrival and departure dates.

Please acknowledge receipt of this letter by returning the attached Registration Form to Alexandra Lehmann and please inform Raphael Marschall that you have confirmed your attendance.

We are looking forward to welcoming you to ISSI at the workshop.

Yours sincerely,

Rafael Rodrigo Executive Director International Space Science Institute Nicolas Thomas University of Bern Main Convenor of the Workshop

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