

Subject: Invitation to the International Space Science Institute Workshop on

Exploring the Earth's Ecosystems on a global scale: Requirements, capabilities and directions in space-borne imaging spectroscopy

In Bern, Switzerland, 21 - 25 November 2016

Dear Colleague,

We would like to invite you to participate and play an active role in a Workshop on " Requirements, capabilities and directions in space-borne imaging spectroscopy", organized and sponsored by the International Space Science Institute (ISSI) in Bern, Switzerland, to be held on November 21-25, 2016. For information about ISSI, please refer to the ISSI homepage at www.issibern.ch.

In the past decades, imaging spectroscopy has proven to provide accurate, quantitative information on the state and evolution of terrestrial and aquatic ecosystems to monitor environmental change and support a sustainable management of land and water resources. We aim to bring together leading scientists in the world working in this field together with international scientists involved in the scientific preparation of several future hyperspectral satellite missions as well as experts from different disciplines such as hydrology, soil sciences, and ecology. The workshop discussion will be organized along a selection of environmental themes and issues. These may include but are not restricted to climate change impacts, land cover changes and surface processes, biodiversity and ecosystem processes, hazards, and natural resources.

Participation at this workshop is by personal invitation only. The conveners have tried to establish a list of participants who are currently active in the field and will cover all the relevant topics. We anticipate that the workshop will provide a better and more comprehensive understanding of the capacity of space-borne imaging spectroscopy to the understanding of terrestrial and aquatic ecosystems. We also hope that the workshop will identify new areas where additional geo-biophysical observations and long-term monitoring from space will make a contribution.

Based on the above, participants will discuss in the whole group and potentially in thematic sub-groups with the objectives to:

- Summarize requirements (e.g., for environmental assessment, numerical model input).
- Review and assess capabilities of imaging spectroscopy.
- Identify synergies among different Earth Observation (EO) missions.
- Identify future directions for information retrieval for specific environmental issues.

An important outcome of the workshop will be a book published in the Space Sciences Series of ISSI by Springer (SSSI, see www.issibern.ch/publications). This volume is NOT intended to be the proceedings of the Workshop, but a collection of in-depth peer-reviewed papers informed by the contributions and discussions at the Workshop with an expected chapter length of around 20 pages. It should provide a coherent picture of the current state of the subject. The papers will be published both in the hardcover book in this series and also individually in issues of Surveys in Geophysics as soon as they are reviewed. We aim for submitting the papers within 3-6 months after the workshop. The journal issue and the SSSI volume are expected to appear about 12 months after the workshop. By accepting this invitation, you also accept to contribute to the SSSI volume.

As seen by ISSI, the production of the book is the main aim. Attendance to the workshop will not exceed 50 people, including a number of young researchers in addition to established experts in the field. Long presentations followed by ample discussion time are envisaged.

ISSI will cover your subsistence costs (hotel and meals) while in Bern and will deal with all organizational matters such as reservations and reimbursements. However, we are not in a position to cover your travel costs.

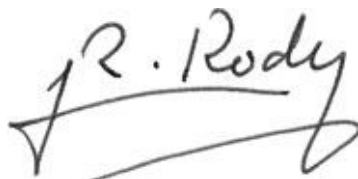
We hope very much that you will be able to attend this workshop and contribute to the volume as described above. Kindly send your confirmation of participation to ISSI (Dr. Nicolas Champollion, champollion@issibern.ch) with cc to Dr. Saskia Foerster (saskia.foerster@gfz-potsdam.de) by March 13 at the latest. Based on the list of attendees, the conveners will then contact you with a suggestion for your contribution to the programme.

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

With best regards,
Nicolas Champollion

on behalf of all the workshop conveners (in alphabetical order) Anny Cazenave (ISSI, Bern), Nicolas Champollion (ISSI, Bern), Saskia Förster (GFZ, Potsdam), Luis Guanter (GFZ Potsdam), José Moreno (Univ. Valencia), Andreas Müller (DLR, Oberpfaffenhofen), Michael Rast (ESA-ESRIN, Frascati) & Michael Schaepman (Univ. Zürich)

Prof. Dr. Rafael Rodrigo
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