

Second Circular

Workshop of the International Space Science Institute (ISSI)

Earth Gravity Field From Space – From Sensors to Earth Sciences

at ISSI, Hallerstrasse 6, CH-3012 Bern, Switzerland, on 11–15 March 2002

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Workshop Secretary: Brigitte Fasler, ISSI Bern, brigitte.fasler@issi.unibe.ch

1. General information

The International Space Science Institute (ISSI) is hosting a workshop on *Earth Gravity Field From Space – From Sensors to Earth Sciences*. The attendance at this workshop is by invitation only. About 50 participants have been approached earlier with a letter of invitation and a First Circular, a large number of whom have given a positive reply.

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. A Third Circular will be distributed a few weeks before the workshop as a reminder and to give some last minute information.

Please consult the letter of invitation and our WWW homepage at www.issi.unibe.ch for general information about ISSI.

2. Workshop topic

The ESA explorer mission GOCE, to be launched in 2005, will enhance our knowledge of the global static gravity field and of the geoid by orders of magnitude. The U.S./German satellite gravity mission GRACE (2002 – 2006) will measure, in addition, the temporal variations of the gravity field to an unprecedented level of accuracy. With these new data a whole range of fascinating new possibilities will be opened for solid Earth physics, oceanography, geodesy and sea level research. The CHAMP satellite, which is presently operating, is paving the way for the future missions and technology. The new generation of gravity missions employs sensor concepts for gravity field measurement, orbit and attitude control and orbit determination that show interesting similarities with space experiments planned in the field of fundamental physics. This workshop brings together acknowledged experts in their field to discuss strategies for ultra precision orbit determination and gravity field modelling with the data of the upcoming gravity field missions, the use of accurate and high resolution gravity models in Earth sciences whereby, in particular, synergy is expected

between the various science fields in their use of this type of new information, and gravity field requirements and possible sensor and mission concepts for the time after GRACE and GOCE.

3. Workshop date and place

The one-week workshop will be held from 9 a.m. on Monday, 11 March 2001 to about lunchtime of Friday, 15 March 2001, at the International Space Science Institute, Hallerstrasse 6 (1st floor), in Bern, Switzerland.

4. Structure of the workshop

The workshop will be structured into six sessions, each of which was composed by a session chair and will consist of a number of introductory talks and a concluding, moderated discussion session. The sessions were deliberately split into two parts so as to encourage all participants to attend the whole week of the workshop.

4.1 Introductory talks

Introductory talks have been assigned by the convenors to some 40 participants (see the workshop programme below). The duration of these talks will be 30 minutes, including some 5–10 minutes for discussion. All introductory talks should lead to a paper in the workshop publication (see Sect. 7).

4.2 Discussion sessions

It is one of the main goals in our workshops to bring different scientific communities together and to foster the dialogue across the borders between different fields. Therefore, ISSI workshops are limited in size, and we also try to limit the time for formal talks. In this workshop we will devote, to conclude each session, some extra time to informal discussions in the plenary. The format of these sessions will be up to the discussion leaders, who may use part of the time for an exposition of their own views, assign brief statements by other participants, and structure the statements by the other participants so a decent point-counterpoint exchange may take place.

5. Workshop programme (pre-final version)

The workshop programme will be structured as follows. Note that some of the introductory talk titles have been chosen by the convenors and thus are tentative only. Speakers should please provide us with a more appropriate title, if they wish, for the final programme when sending the abstract of their talk (see next section). Also note that this is not the final programme, so there still may be slight shifts by one or two half-hour slots.

Introductory talks are 30 minutes including ~5–10 minutes for discussion; discussion sessions are also 30 minutes.

Please see [Programme.pdf](#) for the detailed programme.

6. Abstracts

All speakers are kindly requested to provide an abstract of their presentation. Abstracts must fit on one page using a 12-point Times Roman font (up to about 400 words, but shorter abstracts are fine). They may be submitted to ISSI in any format and by any communication channel that is convenient to the author.

However, we strongly encourage the use of LaTeX and the submission by email to vsteiger@issi.unibe.ch.

LaTeX users please use the following template and replace anything between ellipses with their own text:

```
\documentstyle[12pt]{article}
\pagestyle{empty}
\begin{document}
\noindent
{\large \bf ...Your Title... } \\\[0.2in]
```

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{\bf ...First Author... } \\
{\it ...Affiliation of First Author... } \\[0.1in]
{\bf ...Second Author... } \\
{\it ...Affiliation of Second Author... } \\[0.1in]
% (repeat this sequence for 3rd to n-1th author)
{\bf ... Last Author... } \\
{\it ... Affiliation of Last Author... } \\[0.3in]
% (note larger gap after last author)
%
... Your abstract text coded in standard LaTeX ...
%
\end{document}

```

Please do not use any special macros and do not include any figures, and check that your abstract fits on a single page (size A4) before submitting. Abstracts will be collected in an abstract booklet, which will be handed to the participants at the workshop.

Please submit your abstracts two weeks before the workshop at the latest.

7. Publication

A proceedings volume is planned to be published by [Kluwer Academic Publishers](#), Dordrecht, both as a hardcover book in the *[Space Sciences Series of ISSI](#)* and as an issue of the *[Space Science Reviews](#)* journal. Details about the publication (submission deadline, page limits, etc.) will be discussed at the workshop.

8. Funding of the workshop

ISSI will fund the participants by providing the daily subsistence cost for the time of the meeting up to a maximum of 7 days. 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 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 Windows PCs, Mac PowerPCs, and Sun SparcStations, as well as with Postscript printers for both b/w and colour. All machines have Ethernet connections and run telnet, ftp, Netscape etc., so connecting to your home machine, accessing email, printing, etc. while at ISSI will be no problem.

If participants plan to bring their notebook computers with Ethernet or modem connection they should contact the ISSI computer engineer, Xavier Schneider, beforehand (xavier.schneider@issi.unibe.ch, tel. +41-31-631-3251), informing us exactly what they need, so Ethernet addresses can be reserved and the right connectors can be made available.

In the seminar room there are two overhead projectors, two slide projectors, and a whiteboard. A multi-system video player and projector are also available; the latter can also be connected to a computer's monitor port for electronic presentations. Apart from the seminar room there are a few working group rooms (e.g. for splinter meetings) equipped with an overhead projector and a whiteboard.

A fax machine and a photocopier are available in house, of course.

10. Social programme

An informal welcome drink will be offered at the end of the first day at ISSI, on Monday, 11 March 2001, at 6 pm.

A free afternoon is foreseen on Wednesday, 13 March, on which we will take an excursion to some notable place in the surroundings of Bern, to be announced at the workshop.

A workshop dinner will be offered to all participants in the evening of Thursday, 14 March, at 7:00 pm 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 (nearly) every half hour from inside the airport buildings; see www.sbb.ch/pv/index_e.htm for detailed departure times. The travel time is ~1.5 hours from Zurich airport and ~2 hours from Geneva airport. The return fare from Zurich is SFr 80.- or 133.- for second or first class, respectively, and slightly more from Geneva.

There is also a local airport (Bern Belpmoos, BRN), located a 20 minute shuttle ride from the city centre, with connections to several European cities (Amsterdam, London, Paris, etc.) by [Crossair](#) or by [SwissWings](#). 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.sbb.ch/pv/index_e.htm.

Please see www.issi.unibe.ch/guide.html for a few more travel tips such as links to city maps of Bern, weather forecasts, currency calculators, etc...

12. Registration and hotel reservations

All participants at the workshop are requested to fill in the attached registration and hotel reservation form (you may skip the address etc. lines in case you have given this information with your pre-registration). Hotel bookings in nearby hotels will be made by the workshop secretary, Brigitte Fasler (Tel. +41-31-631-4896, Fax: +41-31-631-4897, email: fasler@issi.unibe.ch). The form should be returned to ISSI as soon as possible, preferably before February. A confirmation will be returned within a few days after the registration. Please see www.issi.unibe.ch/hotel_info.html for a map indicating the location of the hotels and of ISSI.

13. Deadlines

Registration form: 1 February 2001 (... the earlier the better ...)

Abstracts: 1 March 2001

14. List of Participants

See [Participants.pdf](#) for a list with affiliations and email addresses.

Registration Form

ISSI Workshop Earth Gravity Field From Space – From Sensors to Earth Sciences Bern, Switzerland, 11–15 March 2002

I plan to attend this workshop and request a reservation as follows:

Name*:

Affiliation*:

(* Please indicate how this should be printed on the badge; you may skip the address etc. lines below in case you have given this information with your pre-registration)

Address:

City:

Zip Code:

Country:

Tel:

Fax:

Email:

Hotel reservation

If not requested otherwise, a reservation for a single room in a nearby hotel will be made for the following dates:

Arrival date and time:

Departure date and time:

Special requests (e.g. double room):

A confirmation of your reservation, together with a map indicating the location of the hotel, the railway station, and ISSI, will be faxed to you as soon as it has been processed. If you have to cancel this reservation please notify ISSI at least 48 hours in advance.

Comments:

Please send this form to:

International Space Science Institute, Hallerstrasse 6, CH-3012 Bern, Switzerland

or fax it to +41 31 631 4897

or send this information by e-mail to ysteiger@issi.unibe.ch or to fasler@issi.unibe.ch.