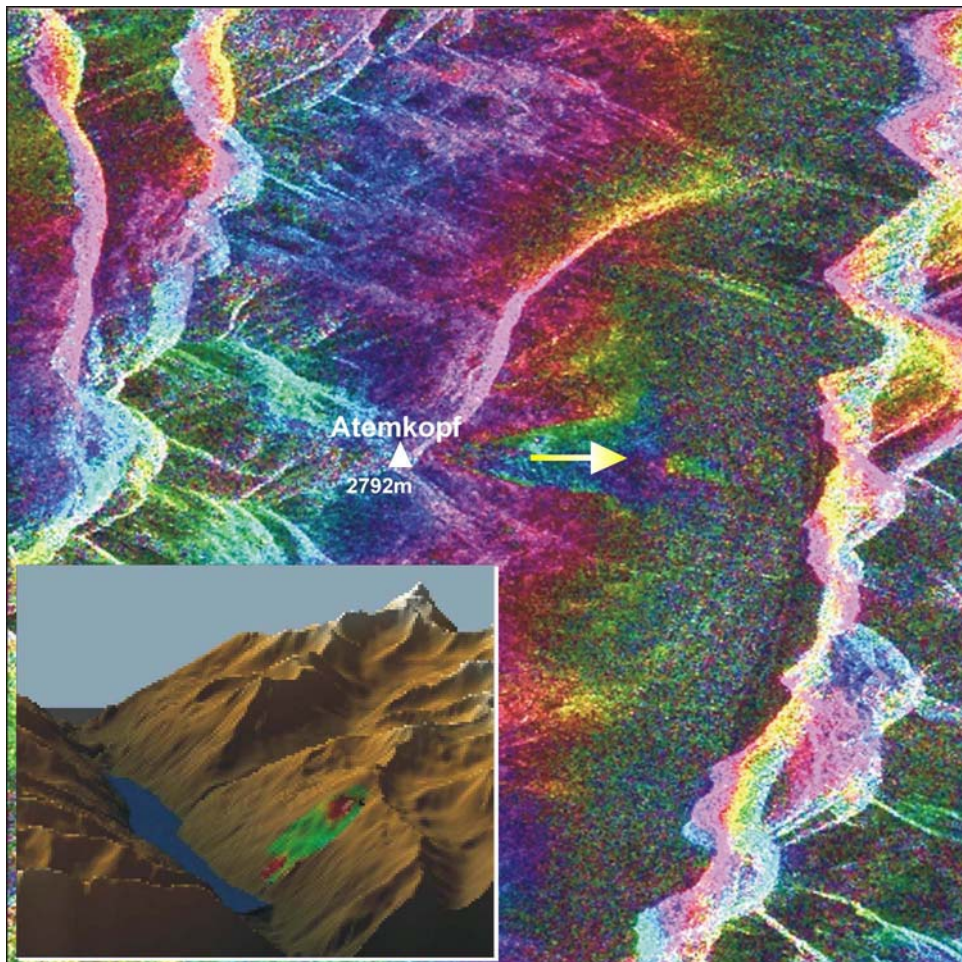


SUMMER SCHOOL ALPBACH 2006 “MONITORING OF NATURAL HAZARDS FROM SPACE” ANNOUNCEMENT



Interferometric analysis of landslide Gepatsch (University of Innsbruck)

July 25 – August 3, 2006, Alpbach/Tyrol – Austria
available on <http://www.ffg.at>

THE SUMMER SCHOOL ALPBACH

Held annually since 1975, the Alpbach Summer School enjoys a long tradition in providing in-depth teaching on aspects of space science and space technology with the aim of advancing the training and working experience of European graduates, post-graduate students, young scientists and engineers.

Participants are given the opportunity to expand and strengthen their knowledge of selected space issues in workshops which are part of the Summer School programme. 2006 will be the 30th Alpbach Summer School in this long-running series and will focus on the theme



“Monitoring of Natural Hazards from Space”

The purpose of the Summer School is to foster the practical application of knowledge derived from lectures, to develop organisational and team-work skills and to encourage creativity. Teams will compete to execute the best project, judged by an independent jury. The teams themselves are responsible for the selection of the subject of the project and for the team structure and working methods.

ORGANISERS AND CO-SPONSORS

The Summer School is organised by the Aeronautics and Space Agency of FFG and co-sponsored by the European Space Agency (ESA) and the national space authorities of its member and cooperating states. A traditional partner is the International Space Science Institute (ISSI).

PROGRAMME COMMITTEE

Chairman:

Harald Posch, Aeronautics and Space Agency of FFG, Vienna

Summer School Director: Johannes Ortner, Vienna

Summer School Administration:

Michaela Gitsch, Aeronautics and Space Agency of FFG, Vienna

Josef Aschbacher, ESA, Directorate of Earth Observations, Paris

Werner Balogh, EUMETSAT, Darmstadt

Roger Bonnet, ISSI, Berne

Elöd Both, Hungarian Space Office, Budapest

Thierry Courvoisier, Swiss Academy of Natural Sciences, Versoix

Henrik Grage, Ministry of Science, Technology and Innovation, Copenhagen

Hartmut Grassl, Max-Planck-Institute, Hamburg

Pascale Ulte-Guerard, CNES, Paris

Jarkko Koskinen, Finish Meteorological Institute, Helsinki

Robert Meisner, DLR, Oberpfaffenhofen

David Parker, BNSC, London

Rüdeger Reinhard, ESA, Education Office, Noordwijk

Helmut Rott, University of Innsbruck

Filipe Duarte Santos, University of Lisboa

Per Erik Skrovseth, Norwegian Space Centre, Oslo

David Stevens, United Nations Office for Outer Space Affairs, Vienna

Martin Turner, University of Leicester

THE SUMMER SCHOOL PROGRAMME

The topic chosen for the 2006 Summer School Alpbach, “Monitoring Natural Hazards from Space”, is concerned with the use of satellites to improve our ability to monitor, predict and mitigate natural hazard events. Losses of life and property due to natural hazards have increased dramatically during recent years. This can partly be attributed to population growth and increasing complexity of economical and technical infrastructure. Moreover, evidence is growing that climate change further enhances the intensity and frequency of natural disasters. Timely and accurate information on geophysical processes preceding and going along with hazard events is crucial for improving the forecasting capabilities and hazard warnings, in order to reduce the losses and the vulnerability to disasters. Natural hazards are complex phenomena, their understanding requires integrated observing systems of satellite-borne, airborne and in-situ sensors. The capabilities of Earth Observation (EO) satellites for disaster preparedness and mitigation have been recognized, and a global strategy has been developed for utilization of satellite resources. The International Charter on Space and Major Disasters, conducted by several major space agencies, is an early response system delivering satellite data rapidly to users affected by disasters. Support to risk management, including early warning, hazard impact assessment and reaction, is also a priority theme of GMES. The Global Monitoring for Environment and Security (GMES) initiative of ESA and EC represents an important milestone for better utilization of EO satellite data in a wide range of application fields.

Although presently operating EO satellites provide important information for natural hazard management, the potential of space observations for this task is still far from being fully exploited.

The Summer School Alpbach 2006 will address innovative satellite mission concepts for improving the understanding of geophysical processes related to natural hazards and for improving hazard prediction and disaster management. The lectures will cover scientific and technical topics of Earth Observation from space and address geophysical aspects and observations of the following hazard types: earthquakes, volcanoes, landslides, floods, wildland fires.

A key element of the summer school is the workshop, to which more than 50% of the time spent in Alpbach will be given. Students will be formed into four teams, each of which will study a different scientific space mission, designed to answer some of the key questions relating to the Summer School topic—Monitoring of Natural Hazards from Space. The teams will be supported by tutors who are experts in space mission design, and by the lecturers. Many of the lecturers will be present throughout the duration of the Summer School and will assist the teams with the definition of the missions. The purpose of the workshop will be to



develop four mission concepts—one by each team, to the point where a space agency could, in principle, take it over and begin the first stage of mission preparation. By the end of the workshop, the teams will have considered not only the instrumentation—having shown that it can meet the scientific requirements, but also the spacecraft orbit, its construction, its sub systems, and its launch, together with a cost estimate. The results of the projects will be delivered as short “mission studies” to be presented by each team, during the final workshop day, to an expert review panel. Lectures will be provided on space mission design and other technical topics relevant to the workshops.

Joint evening dinners (sometimes with after dinner speeches on subjects of general scientific interest) will be organised at the Fichtensaal of the Hotel Böglerhof for lecturers, tutors, students and accompanying persons to provide a convivial atmosphere for informal discussions.

PARTICIPATION

The Summer School is open to 60 selected young science and/or engineering graduates from among the member states and cooperating states of the European Space Agency (ESA). The working language of the Summer School will be English.

The attached application form, duly endorsed by a university professor, head of department or equivalent, should be submitted to the Aeronautics and Space Agency of FFG before **March 31, 2006**. The number of participants will be limited to 60 and confirmation of acceptance will be given by the end of **April 2006**.

A registration fee of € 330,- will be charged. This fee covers working material, free access to copying and computer, e-mail and internet facilities at the School House, coffee breaks and dinner vouchers (including one free drink per evening) throughout the period of the Summer School including the weekend.

FINANCIAL SUPPORT

Participants from Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Switzerland, Sweden and the UK as well as Hungary may be eligible for financial support by the relevant national sponsoring agencies or universities. Belgian students will be informed by the national point of contact to apply to their universities for support of participation, travel and subsistence costs. The application form should indicate the status of application for support.

For additional information on the Summer School and on financial support for participation, please contact your national representative, i.e.:



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Belgian Science Policy Office (BELSPO), Section Space Research and Applications, Wetenschapsstraat 8, Rue de la Science, B-1000 Brussels, Attn: **Werner Verschuere**n, tel :+ 32-2-238 3589 fax: +32-2-2305912, e-mail: verw@belspo.be *)



Danish Research Agency, Ministry of Science, Technology and Innovation, Artillerivej 88, DK-2300 Copenhagen S, Attn: **Cecilie Tornøe**, tel: +45-35 44 63 53, fax: +45-32 57 35 43, e-mail: ct@forsk.dk



Academy of Finland, Research Council for Natural Sciences and Engineering, P.O. Box 99, FIN-00501 Helsinki, Attn: **Kati Sulonen**, tel: +358-9-7748 8480, fax: +358-9-7748 8393, e-mail: kati.sulonen@aka.fi



Centre National d'Etudes Spatiales (CNES), 2, Place Maurice Quentin, F-75039 Paris, Cedex 01, Attn: **Pascale Ulte-Guerard**, tel :+33-1-44 76 75 33, fax :+33-1-44 76 78 67, e-mail : pascale.ulte-guerard@cnes.fr



Deutsches Zentrum für Luft- und Raumfahrt (DLR), Raumfahrtmanagement-Erdbeobachtung, Königswinterer Straße 522-524, D-53227 Bonn-Oberkassel, Attn: **Godela Roßner**, tel: +49-228-447 592, fax: +49-228-447 747, e-mail: godela.rossner@dlr.de



Hungarian Space Office, Dob u. 75-81, H-1077 Budapest, Attn: **Előd Both**, tel: +36-1-461-3639, fax: +36-1-351-0353, e-mail: both@hso.hu



Enterprise Ireland, International Programmes, Glasnevin, IR-Dublin 9, Attn: **Ronan Breslin**, tel: +353-1-808 2707, fax: +353-1-837 0178, e-mail: ronan.breslin@enterprise-ireland.com



Italian Space Agency (ASI), Viale Liegi 26, I-00198 Roma, Attn: **Francesco Rea**, tel: +39-06-8567 235, fax: +39-06-8416265, e-mail: francesco.rea@asi.it



Norwegian Space Centre (NSC), Drammensveien 165, P.O. Box 113 Skoyen, N-0212 Oslo, Attn: **Bo Andersen**, tel:+ 47-22-511830, fax: +47-22-511801, e-mail: bo@spacecentre.no



SRON Netherlands Institute für Space Research, Sorbonnelaan 2, NL-3584 CA Utrecht, Attn: **Gerard Cornet**, tel: +31-30-2535702, fax: +31-30-2540860, e-mail: G.Cornet@sron.nl



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Ministry for Education and Research (MEC-PNE), Apartado 50727, 28080 Madrid, Attn: **Miguel Mas-Hesse**, tel: +34-91-8131196, fax: +34-91-8131160, e-mail: mm@laeff.esa.es



Swedish National Space Board (SNSB), Solna strandväg 86, Box 4006, S-17104 Solna, Attn: **Kristine Dannenberg**, tel: +46-8-6276 498, fax: +468-6275014, e-mail: Kristine.Dannenberg@snsb.se



Schweizerische Akademie für Naturwissenschaften (SANW), Integral Science Data Centre, Chemin d'Ecogia 16, CH-1290 Versoix, Attn: **Thierry Courvoisier**, tel:+ 41-22-950 91 01, fax: +41-22-950 91 33, e-mail: Thierry.Courvoisier@obs.unige.ch

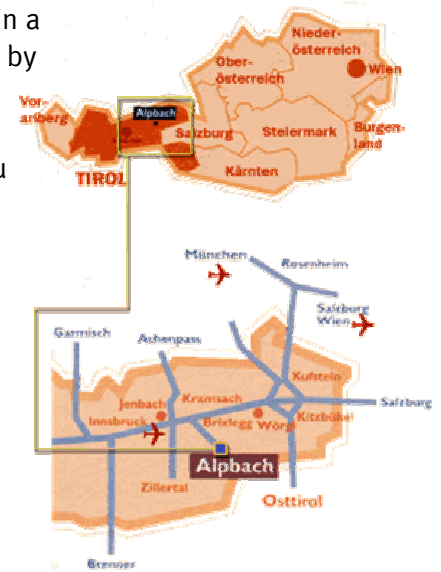


Particle Physics and Astronomy Research Council (PPARC), Polaris House, North Star Avenue, Swindon, SN2 1SZ, Attn: **Steve Cann**, Education, Training and Careers Section, tel: +44-01-793 442026, fax:+44-01-793 442036, e-mail: steve.cann@pparc.ac.uk

*) for support of participation, travel and subsistence costs, Belgian students will be informed by the national point of contact to apply to their universities

LOCAL ARRANGEMENTS

The beautiful village of Alpbach with its 2.300 inhabitants is situated in a small mountain valley, 1000 m above sea level. You can reach Alpbach by car on the Inntal motorway, exit Kramsach. From there it is only 10 km to Alpbach. The nearest railway stations are situated at Wörgl (25 km), Jenbach (20 km) and Brixlegg (10 km). If you choose to come by air, you can fly into Innsbruck (60 km), Salzburg (150 km) or Munich (160 km).



The Summer School will be held in the School House of Alpbach.



All participants (students, tutors, lecturers and accompanying persons) will have joint dinners throughout the period of the Summer School at the Hotel Böglhof (10-15 minutes walking distance from the School). Vouchers for the dinners including one free drink per evening will be distributed to all selected participants upon registration.

Bed & breakfast accommodation in Alpbach will be organised by the Aeronautics and Space Agency of FFG for all participants. Relevant information will be forwarded to the participants in early May 2006. Costs for bed & breakfast accommodation amount to about € 35,- per night, a stay of 11 nights is essential.



Students will be requested to arrive in Alpbach on Monday, July 24, and depart on Friday, August 4, 2006.

Application Form

to be returned *before March 31, 2006* to

Michaela Gitsch
Aeronautics and Space Agency of FFG
Canovagasse 7, A-1010 Vienna

email
tel
fax

michaela.gitsch@ffg.at
+43(0)57755 3302
+43(0)57755 93302

Name:

University/Organisation (full mailing address):

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Tel..... Fax:

e-mail:

Private address:

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Tel: Fax:.....

e-mail:.....

Scientific background:

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Special field of interest:

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Age:

I wish to attend the Summer School Alpach 2006 and apply for financial support to

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| <input type="checkbox"/> Academy of Finland | <input type="checkbox"/> CNES | <input type="checkbox"/> DLR | <input type="checkbox"/> Danish Ministry | <input type="checkbox"/> Enterprise Ireland |
| <input type="checkbox"/> FFG | <input type="checkbox"/> Hungarian Space Office | <input type="checkbox"/> GRICES | <input type="checkbox"/> MEC-PNE | |
| <input type="checkbox"/> NSC | <input type="checkbox"/> PPARC | <input type="checkbox"/> SANW | <input type="checkbox"/> SNSB | |
| <input type="checkbox"/> SRON | <input type="checkbox"/> my university | | | |

Application endorsed by:

Name

Institute

Signature of endorser

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