

Speakers

Kolumban Hutter, Ph. D.: Ten lectures on the dynamics of snow, ice and avalanches (No. 1 to 10)

Professor, c/o Versuchsanstalt für Wasserbau, Hydrologie und Glaziologie, ETH Zurich

Dr. Wolfgang Fellin: Two lectures on quasi-static behavior of ice in the context of structural mechanics (No. 11 and 12)

Associated Professor, Arbeitsbereich für Geotechnik und Tunnelbau, Universität Innsbruck

School fees

Normal: 300 €
Undergraduate students: 150 €

Organisation

Unit of Geotechnical and Tunnel Engineering
Institute of Infrastructure
Faculty of Civil Engineering
University of Innsbruck
Technikerstr. 13
A-6020 Innsbruck, Austria
Tel.: +43 512 507 6670
Fax.: +43 512 507 2996
<http://geotechnik.uibk.ac.at>

Location

University resort Obergurgl



<http://www.uibk.ac.at/obergurgl/>

Accommodation in double room, fees per day and person:

	half board	full board
Normal	66 €	78 €
Undergraduate students	51 €	63 €

Short stay (≤ 3 nights): 6 € supplement.

Registration

Registration until **31. January 2007** with email to Dr. W. Fellin: wolfgang.fellin@uibk.ac.at. Please provide the following data:

- Title, Name
- Affiliation (Company/University)
- Address
- Telephone, email
- Day of arrival / day of departure
- Full or half board

We will send you a detailed invoice. Your registration will get valid upon payment.

Until the 19th February the cancelation charge is 10%, later 100%.

Spring School

The Crystalline Winter Garden:

Snow and Ice and their Environmental Relevance

Keynote lectures: Prof. K. Hutter, Ph. D.
ETH Zürich
Guest lectures: Dr. W. Fellin
University Innsbruck

Obergurgl, 5 – 7 March 2007

Unit of Geotechnical
and Tunnel Engineering
Institute of Infrastructure
University of Innsbruck

❄️ ❄️ Monday ❄️ ❄️

1. Ice and Snow in the Geophysical and Environmental Context
2. Material Description of Ice for Geophysical Processes
— *Break* —
3. Glacier and Ice Sheet Dynamics (Shallow Ice Approximation)
— *Break* —
4. Induced Anisotropy in Polar Ice and its Role in the Reconstruction of the Past Climate

❄️ ❄️ Tuesday ❄️ ❄️

5. Dynamics of Floating Ice (Marine Ice Shelves, Sea Ice, Marine and Fresh Water Ice Plates)
— *Break* —
6. An Integrated View of the Role of Ice in Climate Dynamics
- 7a. A Continuum-mechanical Theory of Dense Snow Avalanches (SH-Equations and Extensions) - Part I
— *Break* —
- 7b. A Continuum-mechanical Theory of Dense Snow Avalanches (SH-Equations and Extensions) - Part II
8. Solutions of the Model Equations and Comparison with Experiments

❄️ ❄️ Wednesday ❄️ ❄️

9. Debris and Mud Flow Dynamics - A Turbulent Granular Multi-phase Description
— *Break* —
10. Mixed Flow-Powder Avalanches
— *Break* —
11. Engineering Models for Creep and Fracture of Ice
12. Application to Foundation on Glacier Ice

Schedule

07:30 – 08:30	breakfast
08:30 – 10:00	1. part
10:00 – 10:30	coffee break
10:30 – 12:00	2. part
12:00 – 16:00	lunch / off for personal activities
16:00 – 17:00	coffee time
17:00 – 18:30	3. part
18:30	dinner

Personal activities

It is possible to arrange for reduced tickets for skiing during the afternoon breaks.

