

Programme

4 February 2015

The evolution of mountain permafrost

Introduction

- 10:00 **Intro & Welcome** | C. Lambiel (Uni Lausanne)
- 10:05 **KEYNOTE: Climate change and impact on mountain cryosphere in the Alps - an overview** | W. Schöner (Uni Graz)
- 10:40 **The TEMPS project: The evolution of mountain permafrost in Switzerland** | C. Hauck (Uni Fribourg)
- 11:00 **COFFEE BREAK**

Session I: Long-term permafrost monitoring

- 11:30 **KEYNOTE: Permafrost monitoring on the summit of Mt. Fuji, Japan** | A. Ikeda (University of Tsukuba)
- 12:05 **Permafrost Monitoring in Switzerland: the concept of PERMOS** | J. Noetzli (Uni Zürich/PERMOS)
- 12:25 **Key messages from observational mountain permafrost research** | B. Staub (Uni Fribourg)
- 12:45 **LUNCH BREAK**

Session II: Permafrost kinematics & processes

- 13:45 **Kärpf landslide - the role of ice filled fractures on deep seated rock slope deformations** | Andrew Kos (Terrasense AG)
- 14:05 **Rockglacier Landform Evolution - A modelling approach** | J. Müller (Uni Zürich)
- 14:25 **An extensive kinematic analysis of a rock glacier in the Swiss Alps** | T. Buchli (ETH Zürich)
- 14:45 **Short term variability of diverse mountain permafrost slope movements** | V. Wirz (Uni Zürich)
- 15:05 **COFFEE BREAK**

Session III: Climate change and modelled permafrost evolution

- 15:35 **KEYNOTE: Permafrost modeling across different scales** | S. Westermann (Uni Oslo)
- 16:10 **Climate scenarios for the Alpine space I: Overview** | S. Kotlarski (ETH Zürich)
- 16:30 **Climate scenarios for the Alpine space II: Downscaling and bias correction** | J. Rajczak (ETH Zürich)

- 16:50 **Multi-sites long-term modelling of mountain permafrost in Switzerland: from calibration to projection** | A. Marmy (Uni Fribourg)

Session IV: Poster session (with beer/wine & apero)

- 17:15 – **Poster contribution open to everyone**
18:45
- 20:00 **CONFERENCE DINNER**

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Risks and challenges of permafrost degradation

Session V: Climate change and thawing permafrost: risks and challenges

- 09:00 **Le permafrost et son évolution dans les Alpes Suisse – les résultats du projet TEMPS en regard de la pratique** | R. Delaloye (Uni Fribourg)
- 09:15 **Permafrost et glace de sous-sol dans les dépôts sédimentaires de haute montagne** | C. Lambiel (Uni Lausanne)
- 09:30 **Glaciers rocheux déstabilisés dans les Alpes valaisannes: exemples et causes possibles** | L. Braillard (Uni Fribourg)
- 09:45 **2005-2015: 10 ans de questionnements sur les écroulements rocheux et le permafrost dans le massif du Mont Blanc** | L. Ravanel (Uni Savoie)
- 10:00 **Infrastruktur und Bauen im Permafrost** | M. Phillips (SLF Davos)
- 10:15 **Discussion**
- 10:40 **COFFEE BREAK**

Session VI: New methods for permafrost investigation

- 11:10 **Systemauswahl und Konzepte für geodätische Überwachungsmessungen im Permafrost** | R. Kenner (SLF Davos)
- 11:25 **Echtzeit Permafrost Monitoring im Mattertal** | J. Beutel (ETH Zürich)
- 11:40 **Geophysikalische Methoden zur Beobachtung von Tauprozessen und Eisgehaltsquantifizierung im Permafrost** | C. Hilbich (Uni Fribourg/ Uni Zürich)
- 11:55 **Methodische Fortschritte zur Überwachung instabiler, hochalpiner Felswände** | M. Keuschnig (alpS Innsbruck)
- 12:10 **Discussion**
- 12:45 **LUNCH BREAK**

Session VII: Case studies

- 13:45 **Verankerungen und Probleme mit Naturgefahren im Permafrost** | H. Rovina (Rovina + Partner)
- 14:00 **Permafrostveränderungen und Instabilitäten in steilem Fels** | L. Fischer (Geotest)
- 14:15 **Permafrost – Eine Schlüsselgröße in der Gefahrenhinweiskarte Periglazial** | P. Mani (Geo7)
- 14:30 **Systemwechsel in Wildbächen nach Felssturz im Periglazialbereich des Einzugsgebiets - Zwei Fallbeispiele aus dem Berner Oberland** | N. Hählen (Kanton Bern)
- 14:45 **Discussion**
- 15:00 **COFFEE BREAK**

Session VIII: Synthesis & discussion

- 15:30 **Synthèse pour l'opérationnel: lien entre recherche et pratique** | E. Bardou (CREALP)
- 15:45 **Discussion**
- 17:00 **END OF SYMPOSIUM**

6-7 February 2015

Excursion

Programme: 2-day ski-touring excursion to the Becs-de-Bosson and Tsavolires rock glaciers (permafrost kinematics monitoring site) in the upper Réchy valley. Overnight stay in a mountain hut at ~3'000 m asl.

Day 1: Access to the area, ski-touring to the permafrost sites and access to the hut / **Day 2:** Ski-touring excursion with a long final downhill part / End of excursion: early afternoon in Sion

Organisation of the excursion: Reynald Delaloye

Costs: 150 CHF (including transportation from and to Sion, cable-car, hut accommodation, dinner and breakfast, mountain guide)

Registration deadline: 9 Jan 2015 / max. 20 participants
Further details are provided on the website.

