Organizing committee

Prof. Martin Beniston  martin.beniston@unige.ch
Mr Marc-André Berclaz  marc-andre.berclaz@epfl.ch
Dr Jérôme Chappellaz  jerome.chappellaz@univ-grenoble-alpes.fr
Mr Alexey Ekaykin  ekaykin@aari.ru
Prof. Suren Erkman  suren.erkman@unil.ch
Prof. Matthias Finger  matthias.finger@epfl.ch
Prof. Philippe Gillet  philippe.gillet@epfl.ch
Prof. Lassi Heininen  lassi.heininen@ulapland.fi
Prof. Eric Hoesli  eric.hoesli@epfl.ch
Dr Marina Kalinina  m.r.kalinina@narfu.ru
Prof. Michael Lehning  michael.lehning@epfl.ch
Prof. Vera Slaveykova  vera.slaveykova@unige.ch
Dr Ksenia Tatarchenko  ksenia.tatarchenko@unige.ch
Dr Natacha Tofield-Pasche  natacha.tofield-pasche@epfl.ch
Climate change has global causes and effects. This conference addresses growing challenges and their consequences for fragile environments both in the high latitudes and high altitudes, focusing on the polar regions and the Alps. It brings together research from natural and social sciences to facilitate dialogue among experts with the aim of comparing observations from these regions, tracing causal chains, and connecting the global and local scales of analysis. Problem-based issues such as biodiversity, urbanization, permafrost, health and risk management, structure the conference workshops. The conference’s emphasis on links between local and global processes, as well as its interdisciplinary approach, also enable the promotion of academic and public awareness on the climate change mechanisms impacting familiar and distant locations.
MONDAY 11 SEPTEMBER 2017
Great Room J.-P. Delamuraz

09:00
Welcome coffee at the cafeteria

10:00
Opening – Plenary session

Mr Marc-André Berclaz
Operational Director of the EPFL Valais Wallis Outpost

Message from EPFL President Prof. Martin Vetterli
by Mr Stéphane Decoutère, EPFL Presidency

Prof. Micheline Louis-Courvoisier
Vice-Rector, University of Geneva

Prof. Philippe Gillet
Swiss Polar Institute & EPFL

Dr Frederik Paulsen
President of the Ferring Pharmaceutical Group, Consul General (Russia), Member of the Board of Directors, Swiss Polar Institute

Mr Stefan Flückiger
Ambassador, Head of Global Issues, Coordinator of Arctic policies, Federal Department of Foreign Affairs

Mr Christophe Darbellay
Conseiller d’Etat, Head of the Department of Economic Affairs and Education in the canton of Valais

Prof. Jean Jouzel
Former Vice-President of IPCC (Nobel Prize for Peace 2007), Gold medal of CNRS
12:00 Flash talks (20 x 2’)

13:00 Standing lunch & poster session at the cafeteria

14:00 Workshops 1–4 (in parallel)
Water resources  room 6
Focus on chemical pollution  room 7
Tourism  rooms 8–9
Paleogeography  rooms 10–11

16:00 Coffee break at the cafeteria

16:30 Round table 1
Security and risk management

17:30 Round table 2
Arctic resources

18:30 Aperitif at the cafeteria

20:15 Dinner at Hotel Valaisia
TUESDAY 12 SEPTEMBER 2017
Great Room J.-P. Delamuraz

08:30

Workshops 5–8 (in parallel)
Evolution of permafrost
Ecology and biodiversity
Ice and snow processes
Antarctic circumnavigation expedition

10:30

Coffee break at the cafeteria

11:00

Round table 3
Remoteness and infrastructure

12:00

Flash talks (21 x 2’)

13:00

Standing lunch & poster session at the cafeteria

14:00

Round table 4
Awareness

15:00

Antarctic circumnavigation expedition
Prof. David Walton, British Antarctic Survey

15:30

Coffee break at the cafeteria

16:00

Conference summary

16:30

Presentations: other projects
Ice memory, Prof. Carlo Barbante, University of Venice
Arcticpedia, Prof. Lars Kullerud, UArctic
Geneva Global, Dr Ksenia Tatarchenko, Geneva Global

17:30

Conference closing
Prof. Konrad Steffen, Director of Swiss Polar Institute

18:00

Program
Program

WEDNESDAY 13 SEPTEMBER 2017
Scientific excursion: Cryospheric degradation in upper Anniviers Valley

07:45
Departure from Congress Center “Le Regent”
Around one hour travel in a coach to Zinal

09:30
Excursion with scientific address on cryosphere degradation

11:30
Lunch

13:00
Visit of measurement station

14:30
Continuation of excursion

15:00
Around one hour trip back to Sierre train station

The upper Anniviers’ Valley is one of the last valley where the hydrological cycle is entirely natural. It is highly glacierized and could be seen as a prototype of Alpine Valley. Like in other places past glacial outburst floods occurs to remind us the power of Nature. The cryosphere degradation due to global warming is sensible and runs today causing immediate worries. Tomorrow evolution of the cryosphere will have a great impact on the processes shaping the valley as well as the life of its inhabitants.

Since 2006, the Canton du Valais has developed its research turned towards applications. Creeping rockglacier, outbursting debris flows, glacial sediment release, discharge evolution are studied for establishing strong scientific basis for supporting the authorities choices. R&D actions encompassed some of the first sites of Switzerland where: near on-line GNSS position is measured, RFID tagged cobbles are recorded and bedload of the glacial tributaries is continuously gauged. More theoretic science action are running with the EPFL regarding the effects of the change in the cryosphere state on the downslope natural processes.

The field trip will synthetize the last eleven years findings, present the current infrastructures and the future perspectives in environmental research in extreme conditions.
Converging responses of high altitude and high latitude hydrological systems to climatic change

Climatic change at both high altitudes and high latitudes will be accompanied not only by overall warming in all seasons, but by shifts in the seasonality of precipitation in many instances. One particular area of convergent response of river systems in both high altitudes and high latitudes will be the impacts of a warming climate on the behavior of the cryosphere, in particular snow (duration and quantity) and glaciers (speed of retreat, volume loss). These changes in the cryosphere will have obvious and often significant impacts on the quantity and seasonality of surface flows both in the Arctic zone and in mountain ranges where snow and ice is still today an important component of the hydrological cycle. This workshop will bring together speakers who are experts in Canadian Arctic climate and hydrological processes, and those who have focused much of their recent research on high mountains such as the European Alps, but also the Andes and the Central Asian mountains, to provide the conference with estimates of past, current and future changes in hydrology in these regions.

Guest Speakers

Prof. John Pomeroy, University of Saskatchewan, Canada
Cold regions hydrology in mountain and northern river basins: measurements, processes and modelling

Prof. Laxmi Sushama, McGill University, Canada
Advances in regional climate modelling in support of water resource assessments for high latitude and altitude regions
This workshop focuses on two major environmental issues common to both alpine and polar regions: climate change, pollution and their interaction. Despite their specificity, the alpine and polar regions share characteristics making them vulnerable to anthropogenic threats. For examples, they concentrate different chemicals used at mid-altitudes. Climate change not only directly affects the alpine and polar environment but also interacts synergistically and exacerbates the impact of other anthropogenic threats. Increasing evidences suggest that the melting of ice and snow, as well as thawing the glaciers and permafrost result in a release of the stored chemicals and could increase their risk for environment and human health.

The workshop has wide and interdisciplinary perspectives on the chemical pollution in the alpine and polar regions with specific emphasis on the contaminant fate and effect on the ecosystem and human health in changing environment.

Contributions at multiple scales – from molecular studies to global cycle – of the fate and effects of both legacy (e.g. POPs, mercury) and emerging contaminants (e.g. perfluoroalkyl sulfonamide) and their environmental impacts are welcomed. In addition, we welcome contributions on contaminant risk assessment and mitigation under climate changes scenarios. Discussing the similarities and differences of the contaminant issues in the alpine and polar regions, sharing the scientific lessons profitable for the development of an efficient long-term management and for improved environmental and human health protection is also expected.

**Guest Speakers**

**Prof. Marc Amyot**, Uni. of Montreal, CA. *Mercury in the changing Arctica*

**Prof. Arja Rautio**, University of Oulu, Finland

*Climate change in Arctic, environmental contamination and human health*

**Prof. Jérôme Fort**, CNRS & University of La Rochelle, France

*Spatial ecotoxicology: tracking large scale mercury contamination of the avian community in a changing Arctic*
TOURISM

Prof. Christophe Clivaz, University of Lausanne, Switzerland

Convergence and divergence between tourism issues in the arctic and alpine areas

During the workshop, we will explore possible convergences between tourism issues in the arctic and alpine areas. Both these regions offer great tourism opportunities featuring pristine nature, diverse natural and cultural landscapes and unique emotional experiences. In the same time, the arctic and the alpine regions experience partly similar kind of tourism-related problems such as limited accessibility, hindered logistics, community impact etc. In addition to that, these two regions are directly affected by ongoing climate change threatening to destroy vulnerable landscapes and local communities. By putting together researchers studying tourism development in the arctic and alpine areas, we hope to gain a profound understanding of the high latitude and high-altitude tourism and possibly develop common approaches to studying these areas.

Guest Speakers

Prof. Albina Pashkevich, Dalarna University, Sweden
Challenges and prospects of developing tourism in the Russian Arctic

Prof. Olof Stjernström, Umeå University, Sweden
Planning in tourist destinations with seasonal variations in population - the provision of technical infrastructure and service facilities

Prof. Tobias Lüthe, University of Applied Sciences, Switzerland
Cooperation, circular economy and tourism: building resilience of arctic and alpine communities

Prof. Martine Rebetez, WSL & University of Neuchâtel, Switzerland
Impact of decreasing snowfall and snow pack on alpine tourism
Under the pressure of current climate change, landscapes of polar and mountain regions are profoundly affected. It leaves imprints on cryospheric features such as glacier volume and extent, permafrost as well as the extent and duration of snow cover. But other features evolve strongly, such as vegetation type, fauna and human occupation. This session will address temporal information provided by different archives such as ice cores or lake records, coming from both polar and mountain regions, allowing one to put in a temporal perspective the current evolution of these environments.

Guest Speakers

**Prof. Vladimir Y. Lipenkov**, Arctic and Antarctic Research Institute, Russia
*Air content of ice – a useful source of paleoenvironmental information in polar and mountain ice cores*

**Prof. Vladimir Mikhalenko**, Russian Academy of Sciences, Russia
*Glaciological changes in the Caucasus mountains and their link with global climate*

**Dr Bruno Wilhelm**, University Grenoble Alpes, France
*From high-altitude alpine lake sediments to past extreme flood patterns and human interactions*
EVOLUTION OF PERMAFROST

Prof. Reynald Delaloye, University of Fribourg, Switzerland

_Evolution of permafrost in high latitudes and high altitudes_

What is changing in the far north? What is changing in the Alps or in other mountain ranges over the world? What do we know and what is unknown? What about the consequences on the carbon cycle, the erosion of coasts, the instability of mountain slopes? Are critical feedback or cascading mechanisms to be point out? These are some of the questions the workshop is intending to tackle about the ongoing evolution of permafrost in the high latitudes or high altitudes and its consequences.

Guest Speakers

Prof. Hugues Lantuit, University of Potsdam, Germany

_Coastal permafrost and climate change in the Arctic_

Dr Britta Sannel, University of Stockholm, Sweden

_Lowland permafrost in subarctic regions – current status and future challenges_

Dr Jeannette Nötzli, PERMOS & SLF, Switzerland

_Trends and strategies of permafrost long-term observation_

Prof. Christian Hauck, University of Fribourg, Switzerland

_The importance of water content/soil moisture monitoring for polar and high mountain permafrost studies_

Prof. Reynald Delaloye, University of Fribourg, Switzerland

_Moving frozen slopes_

Dr Ludovic Ravanel, University Savoie Mont Blanc, France

_The role of permafrost in rockfall triggering, a decade of research in the Mont Blanc massif_
As Alexander von Humboldt climbed Mount Chimborazo in 1802, he recognized that alpine and polar areas share a series of environmental constraints, which shape the ecology of organisms living in these harsh areas. Over two centuries later, global change is drastically and rapidly modifying such conditions, as well as ecological, evolutionary and ecosystem processes within high altitude and high latitude regions. Modern ecological research, on the basis of long-term monitoring programmes, high-tech measurements and experiments, as well as elaborated modelling work, is capable of identifying, rating and forecasting the varied impacts of shifting environmental conditions upon the biosphere in alpine and polar regions. This session will draw from the latest ecological research, to illustrate these exciting scientific advances, thereby stressing parallels, but also contrasts, between high altitude/latitude natural and anthropogenic processes.

Guest Speakers

Prof. Ruben Sommaruga, University of Innsbruck, Austria
Consequences of glacial retreat and meltwaters for the biota of lakes

Dr Helen Wheeler, Centre d’écologie fonctionnelle et évolutive, France
What are the needs for effective pan-arctic wildlife monitoring under climatic, environmental and socio-economic change

Prof. Kyle Elliott, McGill University, Canada
Extreme energetics: climate change and physiological limits of animals in cold environments.

Dr Dorothee Ehrich, University of Tromsø, Norway
Interactions in vertebrate food webs of Arctic and Alpine environments in a changing climate

Dr. Anne Bjorkman, Aarhus University, Denmark
Plant functional trait change across the tundra biome

Dr Sonja Wipf, WSL, Switzerland
Faster, taller, more – patterns and drivers of change in arctic and alpine plant communities
ICE AND SNOW

Prof. Konrad Steffen, WSL & EPFL, Switzerland
Prof. Michael Lehning, SLF & EPFL, Switzerland

Ice and snow processes for reliable climate change predictions

Over the past quarter of a century, Polar Regions have warmed more than other regions on Earth, causing accelerating ice losses. Assessing the current knowledge of the contribution of ice sheets to global and regional sea-level rise is of prime importance now and for the coming decades. The loss of ice can be partitioned into processes related to surface mass balance and to ice discharge, which are forced by internal or external (atmospheric/oceanic/basal) fluctuations. Most ice masses on earth have been built-up from snowfalls via sintering and firn formation. Our understanding on the relevant processes of snow deposition and snow – firn dynamics is incomplete because the physical mechanisms behind e.g. drifting and blowing snow or water transport in snow and firn are very complicated. This session reviews the current knowledge on snow and ice processes and their relevance in the context of climate change predictions. The grand challenges are presented, and it is shown how a combination of remote (satellite) and in situ observations together with modelling can advance our knowledge of these processes.

Guest Speakers

Prof. Michiel van den Broeke, Utrecht University, Netherlands
Tipping points in the melt behaviour of ice caps and ice sheets

Dr Rebecca Mott, SLF, Switzerland
Complexity of snow – atmosphere interactions in the ablation period

Dr Ghislain Picard, University Grenobles Alpes, France
Snow microstructure and remote sensing

Prof. Isabella Velicogna, University of California, USA
Workshop 8

ANTARCTIC CIRCUMNAVIGATION EXPEDITION

David Walton, ACE

Highlights from southern high latitudes

The first project of the Swiss Polar Institute, the Antarctic Circumnavigation Expedition (ACE) will investigate the Southern Ocean, the sub-Antarctic islands and their interactions. This unique expedition will collect data all around the continent in a single summer from December 2016 to March 2017. With a total of 22 international and interdisciplinary projects, we selected only the projects that have a link with high altitude. These projects aim at better understanding the forcing of climate change, at reconstructing climate from ice cores, or at studying the evolution of biodiversity on isolated islands, as well as the potential of organisms to disperse and colonize newly deglaciated sites.

Guest Speakers

Dr Julia Schmale, Paul Scherrer Institut, Switzerland

*In Search of the Preindustrial Atmosphere*

Dr Elizabeth Thomas, British Antarctic Survey, UK

*Reconstructing past climate from sub-Antarctic ice cores*

Ms Pau Cortés, Marine Institute, Spain

*Surveying organic reactive gases and particles across the surface Southern Ocean*

Mr Lewis Cuthbertson, Northumbria University, UK
SECURITY AND RISK MANAGEMENT

Dr Lassi Heininen, University of Lapland, Finland

Thematizing arctic security, and (re)defining the new nexus of security risks in the globalized Arctic

Long-range pollution and climate change are global issues, environmental challenges or wicked problems. Their causes and impacts are seen and will be manifested differently in various parts of the world. At the same time, when this global – local relationship is very important, the impacts will need to be dealt with regionally and locally. This panel on Security and Risk Management aims to discuss on how the security nexus of the 21st century’s globalized Arctic, including stability-building and risk management, is thematised and reconceptualised, and why the Arctic has become geopolitically stable and peaceful. It looks at the human dimension of security, exploring how rapid environmental changes and grand challenges, much due to long-range pollution and climate change, can threaten people(s), local communities and even states, as well as cause changes in security discourses and premises. The panel, consisted of social scientists, analyses on how environmental security first, and then human security were raised and implemented, as well as how the high geopolitical stability was achieved. Followed from this, it argues, and invites the audience to discuss and respond, that a precondition for this was a change in security premises of the Arctic states. It will then make some comparisons on the one hand, between some local communities in the Alps and coastal communities in Iceland, and on the other hand, between the state of security of the ‘global’ Arctic, without real (nuclear) disarmament, to that of the ‘demilitarized’ Antarctic, determined by the International Antarctic Treaty System. Finally, the panel concludes by drawing out both differences and similarities on how security, as well as risk management, is thematised and (re)defined in these three areas.

Guest Speakers
Dr Audur Ingolfsdottir, University of Akureyri, Iceland
Dr Teemu Palosaari, University of Tampere, Finland
This round-table will address the issue of Arctic resources from an interdisciplinary perspective. It will cover the main relevant resources, namely oil, gas, coal, minerals and fisheries. We will look at both the available potential of such resources as well as at the conditions for their exploitation, as influenced by global warming, economics, geopolitics and social issues. The purpose of this workshop is to get a thorough understanding about the likelihood of these resources becoming exploited on an industrial scale along with possible scenarios. The round-table will feature experts and academics specialized in geopolitics, resources dynamics, climate change and geology.

**Guest Speakers**
Dr Andrey Krivorotov, Shtokman Development AG, Russia
Prof. Markus Kroger, University of Helsinky, Finland
The goal of this round-table is to create a dialogue that gives center stage to the questions about human/nature relationships. Whereas the notions of “locality” and “globalization” are the watchwords of all present-day discussions on climate change, we will consider the constitutive elements of the human/nature relationships hinging upon a multiplicity of spatial and temporal scales. Instead of reinforcing traditional dichotomies, such as urban communities and rural areas, humanities and natural sciences, scientific exploration and artistic representation, we will use the concepts of “remoteness” and “infrastructure” as they play out across national, geographical, and disciplinary boundaries. Our lines of inquiry bring together the processes of knowing, living and imagining the natural environments of polar and alpine regions: How does one live a “good life” in the extreme conditions of harsh environments? What connects the Socialist revolution, the conquest of nature, and the vocabulary of the international scientific community? Why does the phrase “climate change” have the potency to hide as much as it reveals about changes on the ground?
Marina Kalinina, Northern (Arctic) Federal University, University of the Arctic, Russia

*Developing Awareness of Changing Arctic*

The round-table discussion includes the issues of raising awareness of changing Arctic in the light of the region’s affecting the rest of the world. Invited experts will introduce their perspectives in cooperation and communication of Arctic science on the level of international arctic organizations and networks; role of teaching and teacher education in the Arctic as a response to the challenges of diverse population, small communities and a need to empower Arctic inhabitants and take a lead on their own lives and environments; as well as best practices of circumpolar education cooperation provides by University of the Arctic (UArctic) member institutions.

**Guest Speakers**

Prof. Lars Kullerud, UArctic
Prof. Tuija Turunen, University of Lapland, Finland
Prof. Peter Sköld, University of Umeå, Sweden
Dr Kirsi Latola, University of Oulu & University of Arctic, Finland
Prof. Paul Arthur Berkman, Tuft University, USA
Agnieszka Ason, Frei University Berlin, DE
Could boundary disputes in high latitudes be resolved in high altitudes?

Alex Haumann, ETH Zurich, CH
Sea-ice induced Southern Ocean cooling in a warming world

Alexandra Meyer, University of Vienna, AT
Cultural adaptation: some theoretical contributions from anthropology to the study of climate change

Benjamin Amann, Queen’s University, CA
When seasonality matters: climate reconstructions from the canadian high arctic and the european Alps over the last millennium using varved lake sediments

Benjamin Hofmann, University of St. Gallen, CH
Stringent policy responses to new threats? Arctic warming, maritime industries and international environmental regulation

Berill Blair, University of Alaska Fairbanks, USA
Toward arctic transformations and sustainability: modeling risks and resilience across scales of governance

Florian Vidal, University of Paris Descartes, FR
Resilience: from the Andean mountains to the arctic

Francesco Comola, EPFL, CH

Franziska Gerber, EPFL & SLF, CH

Johannes Landmann, ETH Zurich, CH
CRAMON – Cryospheric monitoring and prediction online

Kirill A. Smirnov, SPGU, RU
Applying method of automatic iceberg identification for the barents sea area

Marin Kneib, ETH Zurich, CH
Monitoring the water flow of meltwater plumes at the front of Bowdoin glacier, northwest Greenland, by UAV photogrammetry and particle image velocimetry
Michael Sigl, Paul Scherrer Institut, CH
Volcanic eruptions cast shadow over monsoon precipitation and water availability: assessing the risks arising from future eruptions on low-latitude hydroclimate with the help of polar ice cores

Sabuj Bhattacharyya, Indian Institute of Science, IN
Understanding impact of climatic variability on mountain ecosystem using alpine small mammal as model system

Salla Kalliojarvi, University of Lapland, FI
Global security policy and climate change

Suzanna Gartler, University of Vienna, AU
Anthropological methods and theories in interdisciplinary climate change research – thoughts on adaptation and collaborative processes

Tyler Jones, University of Colorado, CA
The human-centric spectrum of climate variability from a west antarctic ice core

Ulrike Egerer, Institute for Tropospheric Research, DE
Understanding atmospheric processes of arctic amplification: balloonborne measurements of vertical energy exchange

Xavi Gallach, Université de Savoie & CNRS, FR
Reconstruction of the rockfall/rock avalanche frequency in the Mont Blanc massif since the last glacial maximum. New results using terrestrial cosmogenic nuclide dating and reflectance spectroscopy

Violetta Gassiy, Kuban State University, RU
Climate change and industrial development in Arctic: threats or opportunities for the indigenous communities?
Alexandru Onaca, West University of Timisoara, RO
Investigating permafrost occurrence in the Rila and Pirin mountains (Bulgaria)

Andrea Baccarini, Paul Scherrer Institut, CH
First results from the Antarctic Circumnavigation Expedition: new particle formation and its chemistry over the sub-Antarctic Ocean

Diana Vladimirova, Arctic and Antarctic Research Institute, RU
Does the temperature affect the isotopic composition of the deposited snow in Princess Elizabeth Land (East Antarctica)?

Dimitri Zogg, EPFL & Geneva Global, CH

Elena Gusakova, Northern Arctic University, RU

Esther Frei, WSL, CH
Climate change impacts on Arctic plants: responses to experimental warming and altered snowmelt regimes

Fabian Lindner, ETH Zurich, CH
Seismic investigations of a Glacier’s weathering crust

Gautier Davesne, University of Montreal, CA
Perennial icy-snow patches and the hydro-morphological dynamic of slopes in a High Arctic polar desert (Ward Hunt Island, Ellesmere, Nunavut)

Iñigo Irarrázav, UNIL, CH
Abstract for session: ice and snow processes for reliable climate change predictions (Koni Steffen, WSL & Michael Leaning, EPFL/SLF)

Iris Thurnherr, ETH Zurich, CH
Meteorological overview and linkage to stable isotopes of atmospheric water vapour in the Southern Ocean during ACE

Jacopo Grazioli, EPFL, CH
Effect of low-level sublimation due to katabatic winds on snowfall in Antarctica

Josué Gehring, EPFL, CH
Riming in alpine and antarctic precipitation
Julien Fouché, Queen’s University, CA
Assessing the remobilization of permafrost carbon during the Holocene using Arctic lake sediments: development of a multi-proxy method for direct physical evidences.

Laure Gandois, CNRS, FR
Fate of carbon in ecosystems affected by permafrost degradation in Northern Siberia

Natalia Nesterova, SPGU, RU
Modelling of hydrological processes at the remote mountainous area of eastern Siberia (the Suntar-Hayata ridge) based on historical data

Pavel Kotov, MGU, RU
Thaw settlement hazard in russian permafrost

Pierre-Allain Duvillard,
Université de Savoie & CNRS, FR
Damages on high-mountain infrastructures in the French Alps: A warning sign on the permafrost fast degradation?

Rémy Mercenier, University of Zurich, CH
Using continuum damage mechanics to simulate iceberg calving from tidewater outlet glaciers

Saskia Gindraux, WSL, CH
Improving runoff predictions in high mountain catchments

Sebastian Vivero Andrade, UNIL, CH
Monitoring high rates of permafrost creep in the Western Swiss Alps

Ashutosh Singh, Wildlife Institute of India, IN
Causes of avian diversity gradients along the Himalayas
Globalizing Polar Issues

High altitudes meet high latitudes

11–12 September 2017
Crans-Montana, Switzerland