

Dear Colleagues,

It is our pleasure to extend this final invitation for you to contribute to the 4<sup>th</sup> Nordic Workshop on Cosmogenic Nuclides (4NWCN). The workshop will take place on 4-6 June 2018 - *spanning a full two and a half days of scientific talks, posters and discussions*. The theme of this 4<sup>th</sup> workshop is the application of *in situ* cosmogenic nuclides in research on '*Landscape development and geohazards*'.



The workshop will be somewhat different than the three past workshops; it would be a pity, when meeting in Norway, not to use the opportunity to get in closer contact with the topography. This is our excuse for having the meeting in a “remote” location where long- and short-term changes in the landscape have consequences for habitation. This location does create some challenges, both for the organisers and the participants, but we attempt to mitigate these as far as possible.

**Our goal is to bring together experts from diverse research fields that all use *in situ* cosmogenic nuclides in their research. We are very much looking forward to sharing new data, creative applications, and collegial and solution-oriented discussions.**



Standing on the Younger Dryas moraine of the Scandinavian Ice Sheet looking into the Geirangerfjord. Photo: HenrietteLinge

### **Workshop programme and submission of abstracts**

We have landed on a framework for the workshop consisting of two full-day programmes on Monday 4 June and Tuesday 5 June, and half-day programme on Wednesday 6 June. This will give us room for nearly 20 oral presentations, in addition to those from the 5 keynote speakers, as well as ample time dedicated to poster presentations, group discussions and mini-workshops on topics of special interest.

#### **Keynote speakers:**

- Dr Jane Willenbring, Scripps Institution of Oceanography, UC San Diego, US: *TBC*
- Dr Kristina Hippe, ETH Zürich, Switzerland: *Constraining changes in Holocene surface erosion rates with in situ 14C-10Be analyses*
- Professor Lewis Owen, University of Cincinnati, US: *Successes and challenges in applying cosmogenic and OSL dating methods for paleoseismic and slip rates studies along active faults*
- Dr Reginald Hermanns, Geological Survey of Norway, Norway: *How do rock slope failures in Norway fit into and how do they contribute to the landscape development?*
- Dr Shasta Marrero, University of Edinburgh, UK: *Filling in the gaps: The recent evolution of 36Cl and new uses in changing landscapes*

The workshop's theme is '*Landscape development and geohazards*', but contributions are not limited to this. We welcome contributions on all aspects of Cosmogenic Nuclide science.

Note the deadline for submission of abstracts and mini-workshop proposals: **21 February 2018** (Midnight CET). Please use the template, which you can download from the workshop webpages: [http://nwc2018.w.uib.no/files/2018/01/4NWCN\\_abstract\\_template.docx](http://nwc2018.w.uib.no/files/2018/01/4NWCN_abstract_template.docx)

- Oral presentations should be 20 minutes.
- Group discussions and mini-workshops can be scheduled for 45 minutes or 2 x 45 minutes.

Notification of acceptance of oral/poster presentations and mini-workshop proposals will be **9 March 2018**.

**Scientific programme committee:**

Dr Jakob Heyman, University of Gothenburg, Sweden (committee leader)

Dr Annina Margreth, Geological Survey of Norway

Dr Lena Håkansson, The University Centre in Svalbard

Dr Marc-André Ostermann, Geological Survey of Austria

Dr Mads Faurschou Knudsen, Aarhus University, Denmark

**Travel and excursion**

We recommend that you look into your travel options in good time. Geiranger is a popular tourist destination. The closest airport to Geiranger is Ålesund Vigra, a small airport with connections to Amsterdam Schiphol, Oslo, Bergen and Trondheim.



Ferry to/from Eidsdal. Photo: HenrietteLinge

We will organise group transport from Ålesund airport (Vigra), via Ålesund and Moa bus terminals, to Geiranger on the afternoon of **Sunday 3 June, departing Ålesund airport ca. 16:30**, and combine the half-day excursion on Wednesday 6 June with return group transport back to Ålesund/Vigra. This allows time for visiting sites close to Geiranger, a 1-hour ferry cruise through Geirangerfjorden, and drive back toward Ålesund. Be aware that the expected arrival time in Ålesund/Vigra is ca. **19:15 on Wednesday 6 June**, making it difficult to get a flight going further than Bergen/Oslo/Trondheim the same evening.



*View from the unstable mountain slope at Åkneset. Hellesylt at the fjord head to the right. Photo: Atle Nesje*

We expect to be able to accommodate all interested participants in the group transport and excursion. The organising committee can provide travel information for those wishing to make their own arrangements for travel to/from Geiranger. More detailed information on the excursion will appear on the 4NWCN webpages.

### Registration

Registration will open on **9 March** and be on a first come, first served basis: the workshop has room for 70 participants. If more people are interested, there will be a waiting list, and we will prioritise those contributing to the programme. We expect basic registration fee to be NOK 1100.- (incl. VAT): to cover the costs of lecture and meeting room hire at Hotel Union.

If you wish to join the group transport to/from Geiranger/Ålesund and excursion there will be an additional fee of **200 NOK** for Sunday 3 June and **550 NOK** for the excursion and group transport on Wednesday 6 June (incl. VAT).



*Gråsteindalen, looking toward the fjord, can see road to Geiranger to the upper left of the lake Photo: Henriette Linge*



### Accommodation

Note that accommodation should still be booked and costs met by participants themselves. Geiranger has a population of about 240 but at least five hotels and more than ten camping sites. Tourism is the main source of income and accommodation during the summer can still be in short supply. The venue for the workshop activities will mainly be Hotel Union, and the hotel offers single rooms including breakfast at a cost of **NOK 750.- per person, per night**. Due to the high-demand for accommodation in Geiranger we have pre-reserved rooms at Hotel Union, which will be held until the final deadline for registration. A booking code will be made available when registration opens on 9 March.



### Useful links:

Ålesund airport: <https://avinor.no/en/airport/alesund-airport/>

Airport shuttle bus (airport - Moa), to be updated March 2018:

[http://www.frammr.no/ezflow\\_mrfylke/view/934028/Ålesund+flybuss+660,+661\\_buss\\_2018.01\\_siste.pdf](http://www.frammr.no/ezflow_mrfylke/view/934028/Ålesund+flybuss+660,+661_buss_2018.01_siste.pdf)

Local bus (Moa - Linge), to be updated April 2018:

[http://www.frammr.no/ezflow\\_mrfylke/view/918666/Sunnmøre+og+FRAM+Ekspress+VoldaKristiansund\\_buss\\_2017.05\\_siste.pdf](http://www.frammr.no/ezflow_mrfylke/view/918666/Sunnmøre+og+FRAM+Ekspress+VoldaKristiansund_buss_2017.05_siste.pdf)

Hotel Union: <http://www.hotelunion.no/>

Weather: [https://www.yr.no/place/Norway/Møre\\_og\\_Romsdal/Stranda/Geiranger/statistics.html](https://www.yr.no/place/Norway/Møre_og_Romsdal/Stranda/Geiranger/statistics.html)

**Important dates and deadlines**

Abstract (and mini-workshop) submission deadline: 21 February 2018 (24:00 CET)

Abstract submission (please use the template, max. 500 words, figures welcome, and indicate oral/poster) to: [4NWCN@uib.no](mailto:4NWCN@uib.no)

Notification deadline for abstract acceptance: 9 March 2018

Registration opens: 9 March 2018

Registration deadline: 20 March 2018

Booking deadline for accommodation at Hotel Union: 20 March 2018

Group transport to Geiranger from Ålesund Vigra & Icebreaker: 3 June 2018

4NWCN Workshop: 4-6 June 2018

Excursion and group transport to Ålesund Vigra: 6 June 2018

**Questions about the workshop?** Contact the organising committee: [4NWCN@uib.no](mailto:4NWCN@uib.no)

Up-to-date information can also be found on the workshop webpages: <https://nwc2018.w.uib.no/>

*We look forward to welcoming you in Geiranger in 2018!*

The Organising Committee

Dr Henriette Linge, University of Bergen & Bjerknes Centre for Climate Research

Dr Anna Hughes, University of Bergen & Bjerknes Centre for Climate Research

Chief engineer Lars Evje, University of Bergen

Dr Anne Hormes, Norwegian Geotechnical Institute & University of Tromsø

Merete Løvoll Rønneberg, World Heritage Foundation Geirangerfjord

Ph.D. candidate Thomas Thuesen, University of Bergen

MSc student Mari Sæbø, University of Bergen