

**ESF Conference in Partnership with LFUI on
Cosmogenic Nuclides
8 - 13 August 2011 | Obergurgl, Austria**



Final Programme

| Monday 8 August | |
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| 17:00 onwards | Registration |
| 19:30 | Welcome Drink |
| 20:00 | Dinner |

| Tuesday 9 August | |
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| 08:30 - 09:00 | Welcome addresses Tibor Dunai - Universität zu Köln, DE David Blaschke - European Science Foundation |
| Session 1: Methodological Revision | |
| 09:00 - 09:45 | Tibor Dunai - Universität zu Köln, DE <i>CRONUS-EU: a synopsis of results</i> |
| 09:45 - 10:30 | Fred Phillips - New Mexico Institute of Mining & Technology, US <i>CRONUS-Earth: a synopsis of results</i> |
| 10:30 - 11:00 | Coffee break |
| 11:00 - 11:45 | Nathaniel Lifton - Purdue University, US <i>Scaling factors for cosmogenic nuclide production - status and outlook</i> |
| 11:45 - 12:30 | John Stone - University of Washington, US <i>Muon-produced cosmogenic nuclides: calibration and geomorphic applications</i> |
| 12:45 | Lunch |
| 14:00 - 15:30 | Discussion |
| 15:30 - 16:00 | Coffee break |
| Session 2: Applications: Burial, Depth-Profiles | |
| 16:00 - 16:20 | Zachary Ploskey - University of Washington, US <i>Recovering Pleistocene glacial erosion rates with cosmogenic nuclide methods</i> (Short talk) |
| 16:20 - 16:40 | Reka-Hajnalka Fülöp - Universität zu Köln, DE <i>Using in-situ cosmogenic C-14 and Be-10 depth-profiles to quantify site-specific Holocene soil erosional events: a sensitivity analysis</i> (Short talk) |
| 16:40 - 17:00 | Pieter Vermeesch - University of London, UK <i>Sand residence times of one million years in the Namib Sand Sea from cosmogenic nuclides</i> (Short talk) |
| 17:00 - 17:20 | Philipp Häuselmann - BOKU Wien, AT <i>Cosmogenic dating of Austrian and Slovenian Caves</i> (Short talk) |
| 17:20 - 18:10 | Darryl Granger - Purdue University, US <i>Burial dating: traditional and novel approaches</i> |
| 19:00 | Dinner |
| 20:30 - 22:00 | Poster Session |

Wednesday 10 August

Session 3: Exposure applications

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| 09:00 - 09:40 | Lucilla Benedetti - CEREGE, Aix-en-Provence, FR <i>In situ ^{36}Cl cosmogenic dating to recover past earthquake histories on limestone normal fault scarps</i> |
| 09:40 - 10:20 | Finlay Stuart - SUERC, East Kilbride, UK <i>Applications of cosmogenic ^3He dating to volcano geomorphology</i> |
| 10:20 - 10:40 | Group Photo |
| 10:40 - 11:00 | Coffee break |
| 11:00 - 11:20 | Dylan Rood - Lawrence Livermore National Laboratory, US <i>Exposure dating of precariously balanced rocks</i> (Short talk) |
| 11:20 - 11:40 | Eleanor Rainsley - University of Exeter, UK <i>In-situ cosmogenic nuclides as a tool for dating relative sea level change: a test case from Broggerhalvoya, western Svalbard</i> (Short talk) |
| 11:40 - 12:00 | Kristell Le Dortz - ENS Paris, FR <i>A new method to assess pre-exposure of sediments in deserts environment and endorheic regions</i> (Short talk) |
| 12:00 - 12:20 | Marc Ostermann - University of Innsbruck, AT <i>Cosmogenic nuclide dating of catastrophic rockslides/rock avalanches in Tyrol (Austria) compared with other dating methods</i> (Short talk) |
| 12:30 | Lunch |
| 13:30 - 15:30 | Discussion |
| 15:30 - 16:00 | Coffee break |

Session 4: Erosion, in-situ

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| 16:00 - 16:40 | Regis Braucher - CEREGE Aix-en-Provence, FR <i>Quantification of landscape processes with in situ produced cosmogenic nuclides</i> |
| 16:40 - 17:20 | Alexandru Codilean - GFZ-Potsdam, DE <i>Stochastic sediment transport: The single grain methodology</i> |
| 17:20 - 17:40 | Florian Kober - ETH-Zürich, CH <i>Debris flows and catchment wide denudation rates</i> (Short talk) |
| 17:40 - 18:00 | Christoff Andermann - Université de Rennes, FR <i>Erosion in the Nepal Himalayas from cosmogenic nuclides, suspended load and precipitation distribution</i> (Short talk) |
| 18:00 - 18:20 | Dirk Scherler - Universität Potsdam, DE <i>^{10}Be-derived erosion and palaeo-erosion rates from the NW Himalaya</i> (Short talk) |
| 18:20 - 18:40 | Nicolas Bellin - Université Catholique de Louvain, BE <i>Contrasting Modern and Cosmogenic-nuclide derived erosion rates for the Betic Cordillera, Spain</i> (Short talk) |
| 19:00 | Dinner |
| 20:30 - 22:00 | Poster Session |

| Thursday 11 August | |
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| Session 5: AMS, analytical methods | |
| 09:00 - 09:45 | Keith Fifield - ANU, Canberra, AU <i>AMS methodology, history and outlook</i> |
| 09:45 - 10:30 | Marcus Christl - ETH-Zürich, CH <i>Low-energy AMS: developments and outlook</i> |
| 10:30 - 11:00 | Coffee break |
| 11:00 - 11:20 | Stefan Heinze - Universität zu Köln, DE <i>Results of first performance tests of CologneAMS for standard cosmogenic nuclides</i> (Short talk) |
| 11:20 - 11:40 | Kristina Hippe - ETH-Zürich, CH <i>The effect of climate change on surface exposure ages: insights from combined ^{10}Be - in-situ ^{14}C analysis (Gotthard Pass, Central Swiss Alps)</i> (Short talk) |
| 11:40 - 12:00 | Swann Zerathe - University Nice Sophia Antipolis, FR <i>Dating chert using cosmogenic ^{10}Be: comparison of ^{36}Cl and ^{10}Be method on carbonate gravitational scarps</i> (Short talk) |
| 12:00 | Lunch |
| 13:30 | Half-day excursion to the Köfels landslide Lead by Marc Ostermann, University of Innsbruck, AT |
| 19:00 | Dinner |
| 20:00 - 21:00 | Forward Look Plenary Discussion |

| Friday 12 August | |
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| Session 6: Erosion, meteoric | |
| 09:00 - 09:45 | Friedhelm von Blanckenburg - GFZ Potsdam, DE <i>The $^{10}\text{Be}/^{9}\text{Be}$ ratio as a weathering tracer</i> |
| 09:45 - 10:30 | Jane Willenbrink - University of Pennsylvania, US <i>Atmospheric cosmogenic nuclides as tracer for soil processes and sediment transport</i> |
| 10:30 - 11:00 | Coffee break |
| 11:00 - 11:45 | Hella Wittmann-Oelze - GFZ-Potsdam, DE <i>Large-scale denudation and sediment fluxes from cosmogenic nuclides in the Amazon Basin</i> |
| 11:45 - 12:10 | Allan Bacon - Duke University, US <i>Meteoric ^{10}Be in acidic soils: a new approach from a North American Ultisol</i> |
| 12:30 | Lunch |
| 13:30 - 15:30 | Discussion |
| 15:30 - 16:00 | Coffee break |
| Session 7: Meteoric | |
| 16:00 - 16:20 | Lucie Menabreaz - CEREGE Aix-en-Provence, FR <i>Cosmogenic Beryllium-10 in marine sediments: a record of the geomagnetic moment variations during the Brunhes period</i> (Short talk) |
| 16:20 - 17:00 | Martin Frank - University of Kiel, DE <i>Cosmogenic nuclides in marine archives as tracers in paleoceanography and paleoclimatology</i> |
| 17:00 - 17:40 | Didier Bourlès - CEREGE Aix-en-Provence, FR <i>The use of the $^{10}\text{Be}/^{9}\text{Be}$ authigenic ratio for absolute dating over the last 14 Ma of marine and continental sedimentary deposits: Necessary conditions and applications</i> |
| 19:00 | Reception and Conference Dinner |

Saturday 13 August

07:00

Breakfast and Departure

List of Accepted Posters

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| 1 | Barrows | Timothy | Age of Mega Floods on the White Nile River |
| 2 | Bekaddour | Toufik | Dip direction controls of bedrock on channel morphologies and denudation rates in the eastern Swiss Alps |
| 3 | Bentley | Michael | Intervals of rapid Holocene ice sheet thinning in West Antarctica |
| 4 | Bourlès | Didier | Cosmic-ray attenuation by seasonal snow cover revealed by neutron-detector monitoring: implications for cosmic-ray exposure studies in mountainous areas |
| 5 | Chang | Mien | Interaction between alluvial fan terraces and fault activities: Using cosmogenic nuclides dating method in eastern Taiwan |
| 6 | Chen | Rou-Fei | Application of in situ-produced cosmogenic nuclides to decipher activity of the deformation front in western Taiwan |
| 7 | Geiger | Alessa J. | Constraining the maximum altitude of the Patagonian Ice Sheet (southern sector) over the last glacial cycle using in-situ produced terrestrial cosmogenic nuclide surface exposure dating |
| 8 | Gheorghiu | Delia | Cosmogenic ^{10}Be constraints on the deglaciation history in the Rodna Mountains, Northern Romania |
| 9 | Glotzbach | Christoph | Deciphering the long-term and short-term driving forces of landscape evolution, an example from the Western Alps |
| 10 | Hein | Andrew | Pleistocene history of the Slessor Glacier, Weddell Sea embayment, Antarctica |
| 11 | Kang | Chu | Study on Tectonic Activity using Geomorphologic Analysis of the Eastern Flank of the Central Range in Taiwan |
| 12 | Lindow | Julia | Glacial retreat since the Last Glacial Maximum – New constraints from the Walgreen Coast, West Antarctica |
| 13 | Mathers | Hannah | New insights into high level subglacial thermal boundaries: cosmogenic evidence from NW Scotland |
| 14 | Mccann | Louise | The application of detrital ^{21}Ne to unravelling fluvial stratigraphy of the Great Plains |
| 15 | Medynski | Sarah | Cosmogenic ^3He : a tool for dating the geomorphological evolution of an active rift |
| 16 | Munack | Henry | Late Quaternary basin-wide erosion rates in the upper Indus valley, western Tibetan Plateau Margin, from cosmogenic ^{10}Be |
| 17 | Puchol | Nicolas | ^3He variability in sands of Ethiopian rivers and its influence on cosmonuclides-based average denudation rates |
| 18 | Rixhon | Gilles | Reconstructing the middle Pleistocene uplift/incision episode in NE Ardennes (Belgium) - Insights from $^{10}\text{Be}/^{26}\text{Al}$ dating of river terraces |
| 19 | Rixon | Rebecca | Using cosmogenic isotopes to identify areas of biological refugia in the eastern Antarctic Peninsula |
| 20 | Rodés | Ángel | Complex-exposure domain in "banana plots" from two cosmogenic isotope concentrations. Are burial processes required? |
| 21 | Sarikaya | Mehmet | Applications of Cosmogenic Isotopes from Turkey |
| 22 | Savi | Sara | ^{10}Be in the understanding of sediment transfer |
| 23 | Schmidt | Silke | Be-10 exposure dating of depositional surfaces at the eastern Andes: A note of caution on the use of boulders |
| 24 | Shanks | Richard | What was hard is easy and what was easy is hard: Al, Be and CI-AMS |
| 25 | West | Nicole | Using meteoric ^{10}Be to estimate soil residence times and erosion rates at the Susquehanna Shale Hills Critical Zone Observatory, PA |
| 26 | Wiesel | Hendrik | Glaciation history of Queen-Maud-Land (Antarctica)- new exposure data from Nunataks |