

## Post EGU Zoom Seminar May 14, 2020 14.00-16.30

### “Rockfall, Rock Slides and Rock Avalanches”

(Chairperson: Michael Krautblatter, Axel Volkwein, Matt Westoby, Anne Voigtländer, Andreas Ewald)

<https://us02web.zoom.us/j/82380983909?pwd=a0JsdVpBcExlWHJVSTFJU2JyQ1U4dz09>

Meeting-ID: 823 8098 3909 Password: 014771 (Questions? > m.krautblatter@tum.de)

Dear authors of the Post EGU Zoom Seminar,

To structure the session, please send me your presentations as pdfs until May 13, 12 pm. You will have 7 minutes to present and 3 minutes for questions for each talk. All attendees can type in questions in the chat and we will ask them in your name after the talk in the order of the chat.

#### **14.00-14.10**

Structural geology of large (ancient) rockslides - an indicator for a seismic or climatic origin?

Emilie Lemaire, Anne-Sophie Mreyen, and Hans-Balder Havenith

#### **14.10-14.20**

Undrained loading in basal shear zones modulates the slow-to-fast transition of giant creeping rockslides

Federico Agliardi, Marco M. Scuderi, Nicoletta Fusi, and Cristiano Collettini

#### **14.20-14.30**

Paraglacial responses in deglaciating cirque walls: Implications for rockfall magnitudes/frequencies and rockwall retreat

Ingo Hartmeyer, Robert Delleske, Markus Keuschnig, Michael Krautblatter, Andreas Lang, Lothar Schrott, and Jan-Christoph Otto

#### **14.40-14.50**

Lake pushed out by 200 m<sup>3</sup> rock avalanche (Zugspitze / Lake Eibsee, D) - New geophysical and sedimentological insights into interactive processes

Sibylle Knapp, Philipp Mamot, Bernhard Lempe, and Michael Krautblatter

#### **14.50-15.00**

CrowdSlide – a mobile web application for building a database of gravitational mass movements using volunteer field reports

Jona Schlegel, Annemarie Grass, and Florian Fuchs

**15.00-15.10 General Discussion Part 1 (you can switch your videos on for questions)**

#### **15.10-15.20**

NoeTALUS - Methods for producing rock fall hazard maps of different scales in Lower Austria

Alexander Preh, Thomas Glade, Arben Koçiu, Emmanouil Fleris, Mariella Illeditsch, Martin Mergili, Nina Marlovits, Joachim Schweigl, and Michael Bertagnoli

**15.20-15.30**

Benchmark rock fall hazard assessment and safety concept for touristically developed alpine gorges (Höllentalklamm, Bavarian Alps).

Benjamin Jacobs, Andreas Grabmaier, and Michael Krautblatter

**15.30-15.40**

Identifying past rockfall trajectories and runout distances from detailed 3D terrain model: The case of the Mel de la Niva mountain, Switzerland.

François Noël, Synnøve Flugekvam Nordang, Michel Jaboyedoff, and Marc-Henri Derron

**15.40-15.50**

Probabilistic identification of rockfall source areas: an example from El Hierro island (Canary Island, Spain)

Mauro Rossi, Roberto Sarro, Paola Reichenbach, and Rosa María Mateos

**15.50-16.00**

Methodology for rockfall activity identification and Machine Learning classification based on Point Clouds monitoring in Montserrat Massif (Spain)

Laura Blanco, David Garcia-Sellé, Nicolas Pascual, Anna Puig, Maria Salamó, Marta Guinau, Òscar Gratacós, Josep Anton Muñoz, Marc Janeras, and Oriol Pedraza

**16.00-16.10**

Probabilistic identification of rockfall source areas: an example from El Hierro island (Canary Island, Spain)

Mauro Rossi, Roberto Sarro, Paola Reichenbach, and Rosa María Mateos

**16.10-16.20**

Geomechanical characterization of rock masses by means of remote sensing techniques

Lidia Loiotine, Marco La Salandra, Gioacchino Francesco Andriani, Giovanni Barracane, Marc-Henri Derron, Michel Jaboyedoff, Antonella Marsico, and Mario Parise

***16.20-16.30 General Discussion Part 2 (you can switch your videos on for questions)***

**EGU CHAT May 7, 2020 1400-1530 Schedule Rockfall Rock Slides and Rock Avalanches Session**

**(Chairperson: Michael Krautblatter, Axel Volkwein, Matt Westoby, Anne Voigtländer, Andreas Ewald)**

Dear authors of the rockfall session,

To structure the session, we will **introduce your displays in the following order**. You have **time to provide a short summary of your display in the chat** (probably works best **if you have prepared this few line text before**). If presenters are not present in the chat we can use the time to discuss the other displays.

14.00-14.03: 1 D1802 | EGU2020-6793

Deciphering Rainfall and Freeze thaw cycles as long-term preparatory factors for alpine rockfalls

Greta Bajni, Corrado Camera, and Tiziana Apuani

14.03-14.06: 2 D1803 | EGU2020-11955

Paraglacial responses in deglaciating cirque walls: Implications for rockfall magnitudes/frequencies and rockwall retreat

Ingo Hartmeyer, Robert Delleske, Markus Keuschnig, Michael Krautblatter, Andreas Lang, Lothar Schrott, and Jan-Christoph Otto

14.06-14.09 3 D1804 | EGU2020-7303

Influences of Joint Persistence and Groundwater on Wedge Failure Potential of Jointed Rock Slope

Yu-Hsuan Chang, Cheng-Han Lin, and Ming-Lang Lin

14.09-14.12 4 D1805 | EGU2020-19352

Rockfall fragmentation simulations of real scale tests

Gerard Matas, Nieves Lantada, Jordi Corominas, Josep Antoni Gili, Roger Ruiz-Carulla, and Albert Prades

14.12-14.15 5 D1806 | EGU2020-13810

Lake pushed out by 200 m<sup>3</sup> rock avalanche (Zugspitze / Lake Eibsee, D) - New geophysical and sedimentological insights into interactive processes

Sibylle Knapp, Philipp Mamot, Bernhard Lempe, and Michael Krautblatter

14.15-14.18 6 D1807 | EGU2020-9675 | Highlight

Undrained loading in basal shear zones modulates the slow-to-fast transition of giant creeping rockslides

Federico Agliardi, Marco M. Scuderi, Nicoletta Fusi, and Cristiano Collettini

14.18-14.21 7 D1808 | EGU2020-13369

Monitoring and Analysis of Landslide-Glacier Interactions at the Great Aletsch Glacier (Switzerland)

Enea Storni, Simon Loew, Marc Hugentobler, and Andrea Andrea Manconi

14.21-14.24 8 D1809 | EGU2020-1474

Centrifuge-model test study of key hazard factors of deep toppling deformation and disaster pattern of anti-dip layered-rock slope under gravity

Da Zheng and Hua Zhao

14.24-14.27 9 D1810 | EGU2020-2545

Investigation of rainfall-induced failure processes and characteristics of wedge slopes using physical models

Chia-Ming Lo, Chen-Han Chu, and Yi-Xiang Su

14.27-14.30 10 D1811 | EGU2020-10313 | Highlight

Measuring rock moisture using different techniques in the sandstone area of Saxony

Oliver Sass

14.30-14.33 11 D1812 | EGU2020-14338

Modelling rock walls destabilization caused by hydrostatic pressure in frozen/unfrozen bedrock (Hochvogel & Zugspitze, Germany)

Verena Stoll, Riccardo Scandroglio, and Michael Krautblatter

14.33-14.36 12 D1813 | EGU2020-5292

Structural geology of large (ancient) rockslides - an indicator for a seismic or climatic origin?

Emilie Lemaire, Anne-Sophie Mreyen, and Hans-Balder Havenith

14.36-14.39 13 D1814 | EGU2020-12633

Building regression models to estimate tree traits influential to slope stability

Hsin-Tien Lee, Guo-Zhang M. Song, Li-Wan Chang, Cang-wei Chen, and Hung-Yen Hu

14.39-14.42 D1815 | EGU2020-13512

Oxidation of black shale and its deterioration mechanism in Xujiaping rockslide, Southwestern China

Chunwei Sun, Marc-Henri Derron, Michel Jaboyedoff, and Sixiang Ling

14.42-14.45 15 D1816 | EGU2020-13540

The effect of weathering on rock wall erosion and rockfall generation at La Cornalle, Switzerland

Li Fei, Marc-Henri Derron, Tiggi Choanji, Michel Jaboyedoff, and Chunwei Sun

14.45-14.48 16 D1817 | EGU2020-13961

Geomechanical characterization of rock masses by means of remote sensing techniques

Lidia Loiotine, Marco La Salandra, Gioacchino Francesco Andriani, Giovanni Barracane, Marc-Henri Derron, Michel Jaboyedoff, Antonella Marsico, and Mario Parise

14.48-14.51 17 D1818 | EGU2020-16503

CrowdSlide – a mobile web application for building a database of gravitational mass movements using volunteer field reports

Jona Schlegel, Annemarie Grass, and Florian Fuchs

14.51-14.54 18 D1819 | EGU2020-19073

Process dynamics, real time monitoring and early warning at an imminent cliff fall (Hochvogel, Allgäu Alps)

Johannes Leinauer, Benjamin Jacobs, and Michael Krautblatter

14.54-14.57 19 D1820 | EGU2020-22287 | Highlight

Can we infer the stiffness of the Matterhorn (CH) based on ambient vibrations?

Samuel Weber, Jan Beutel, Mauro Häusler, Paul R. Geimer, Donat Fäh, and Jeffrey R. Moore

14.57-15.00 20 D1821 | EGU2020-6450

The study of Rockfall in Keelung Mountain Area of Northeastern Taiwan

Bo Xu

15.00-15.03 21 D1822 | EGU2020-11826

Full scale field testing of temporary rockfall protection measures

Axel Volkwein, Florian Hofstetter, and Marc Hauser

15.03-15.06 22 D1823 | EGU2020-11244

Back-analysis of rockfalls for the definition of an empirical vulnerability function for buildings (withdrawn)

Sandra Melzner, Paolo Frattini, Federico Agliardi, and Giovanni Battista Crosta

15.06-15.09 23 D1824 | EGU2020-9902 | Highlight

NoeTALUS - Methods for producing rock fall hazard maps of different scales in Lower Austria

Alexander Preh, Thomas Glade, Arben Koçiu, Emmanouil Fleris, Mariella Illeditsch, Martin Mergili, Nina Marlovits, Joachim Schweigl, and Michael Bertagnoli

15.09-15.12 24 D1825 | EGU2020-20353

The RockModels Project: Rockfalls Characterization and Modelling

Nieves Lantada, Jordi Corominas, Josep A. Gili, Gerard Matas, Roger Ruiz-Carulla, Albert Prades, Càrol Puig-Polo, M. Amparo Núñez-Andrés, Jose Moya, Felipe Buill, and Olga Mavrouli

15.12-15.15 25 D1826 | EGU2020-18427

Benchmark rock fall hazard assessment and safety concept for touristically developed alpine gorges (Höllentalklamm, Bavarian Alps).

Benjamin Jacobs, Andreas Grabmaier, and Michael Krautblatter

15.15-15.18 26 D1827 | EGU2020-5783

Methodology for rockfall activity identification and Machine Learning classification based on Point Clouds monitoring in Montserrat Massif (Spain)

Laura Blanco, David Garcia-Sellé, Nicolas Pascual, Anna Puig, Maria Salamó, Marta Guinau, Òscar Gratacós, Josep Anton Muñoz, Marc Janeras, and Oriol Pedraza

15.18-15.21 27 D1828 | EGU2020-19353

Regional scale mapping of rockfall-protection forest efficiency

Gianluca Sala, Camilla Lanfranconi, Paolo Frattini, and Giovanni B. Crosta

15.21-15.24 28 D1829 | EGU2020-11446

Identifying past rockfall trajectories and runout distances from detailed 3D terrain model: The case of the Mel de la Niva mountain, Switzerland.

François Noël, Synnøve Flugekvam Nordang, Michel Jaboyedoff, and Marc-Henri Derron

15.24-15.27 29 D1830 | EGU2020-10469

Probabilistic identification of rockfall source areas: an example from El Hierro island (Canary Island, Spain)

Mauro Rossi, Roberto Sarro, Paola Reichenbach, and Rosa María Mateos