

Failure Prediction and Hazard Management of the “Insel” Compartment at Brienzen/Brinzauls

When: Aug 22, 2023 @ 12:00

Where: In Person: NO C 6

Online: <https://ethz.zoom.us/j/65633124831>

Who: Prof. Em. Simon Loew

Abstract: Due to very high hazard and risk levels, the Brienzen/Brinzauls landslide complex has been studied during the last years with unprecedented detail by many earth scientists and engineers. The “Insel” compartment of this landslide complex failed in the night of June 15, 2023, one month after the village had been evacuated. This talk explains our current understanding of the geological predisposition and hazard scenarios, the expected and observed long-term displacement evolution, the early warning criteria and evacuation phases, and finally the collapse processes of the “Insel” compartment. This unique case demonstrates the importance of process understanding for a successful management of potentially catastrophic slope failures, as well as the limitations of classical slope failure predictions models.



Figure 1: Collapse of the 'Insel' compartment. Photo: Christoph Nänny

Simon Loew has been Chair and Professor for Engineering Geology at ETH Zurich from 1996-2022. He and his group have worked intensively on rockslide formation, failure and hazards all over the globe. At Brienzen/Brinzauls Simon Loew has been involved as an expert consultant and researcher for many years, and as a member of the geological advisory team during the crisis of the “Insel” compartment.