

Conférence

Hazard and risk along Alpine mountain trails: identification, mapping and reconstruction of previous events

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Anthropole, salle 3148



La conférence

Climatic variations in action in the last few decades are causing an acceleration in geomorphic processes that characterise the high mountain morphoclimatic system; this is producing huge changes in the Alpine landscape, affecting also the tourist paths through instability phenomena. Consequently, the contemporary increase in tourist presence determines an increase in vulnerability and risk. Moreover mountain trails are becoming an important resource for geomorphosites fruition and for didactic application.

The census of the main geomorphological hazards and of the morphological characteristics increasing visitors vulnerability along the trails represents an important starting point for risk assessment and mitigation.

The reconstruction and dating of past geomorphological events, for example debris flows, represents an helpful approach to investigate the relationship with climatic parameters and the evolution over time of their frequency and intensity. In this sense dendrogeomorphology allows to realize detailed studies not only for what concern the geomorphic process evolution in time but also for detecting the spatial extent of areas affected in the past and their possible modification in the future.

La conférencière

Prof. Manuela Pelfini is Associated Professor (since 1988) (GEO 04 Physical Geography and Geomorphology) at Milano University. Her main research topics concern the study of mountain environments (especially regarding glacial and periglacial geomorphology), paleoclimatic and paleoenvironmental reconstructions, responses of the biological and abiological systems to the global change, cultural heritage and geomorphosites - their valorisation and evolution in relation to natural and anthropic processes-, hazard and risk in the Alpine environment.

She teaches *Geomorphology and Environmental geology* and *Physical Geography* in academic courses on Natural Sciences. She is the scientific coordinator of the dendrogeomorphological laboratory at the Earth Sciences Department, of University of Milano.