

Seminario

Extreme rainfall in a changing climate: occurrence probability and geomorphological impacts

Martedì, 26 aprile – ore 16:30 Aula Arduino

Relatore: **Dr. Francesco Marra**

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Extreme precipitation causes natural hazards that are among the most damaging in Italy and globally, and serves as freshwater recharge for groundwater and surface water reservoirs. Quantifying the probability of occurrence of extreme rainfall events in present and future climates is thus an open research question of the foremost importance, with applications in risk assessment, water resources management, hydrological design, insurance business and policy making.

In this seminar, I'll provide examples of extreme rainfall events, showing the challenges we face in accurately quantifying rainfall amounts and discussing the related implications for the management of hydrological and geomorphological risks. I'll then present some recent developments in the statistical description of extremes and I'll discuss promising applications in the fields of climatology, hydro-geomorphology, and climate change impact studies.

Proponente: **Fabrizio Nestola**