UNIVERSITA' DEGLI STUDI DI PADOVA DIPARTIMENTO DI GEOSCIENZE

Via Gradenigo 6 35131 Padova www.geoscienze.unipd.it

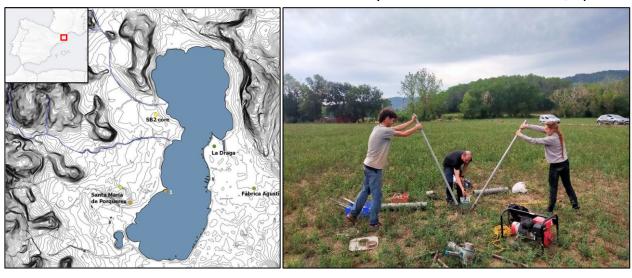


Seminario

Landscapes in Transition: Volcanism, Paleoenvironments and Human Impact in NE Iberia

Thursday, 27 November 2025 – 16:30, Aula Arduino

Relatore: Dr. Carlos Sánchez-García – University Autonomous of Madrid, Spain



The seminar focuses on the integration of paleoenvironmental and geoarchaeological studies from NE Iberia, aiming to the reconstruction of long-term landscape evolution and human—environment interactions. In particular two sites will be considered for their complementary data:

- a) La Garrotxa Volcanic Field (GVF), where a sedimentary sequence of 50 m documents three major volcanic episodes over the last 50 ka, which generated alternating lacustrine and fluvial environments. Multi-proxy analyses (chronostratigraphy, sedimentology, geochemistry and pollen) reveal marked climatic oscillations, shifts from MIS 2 steppe landscapes to Early Holocene deciduous forests, and the significant geomorphic influence of volcanic activity on local ecosystems and human presence.
- b) Lake Banyoles, where sediment cores provide a detailed reconstruction of Holocene lakeshore dynamics and the environmental context of Late Prehistory occupations. The results show early Holocene high lake levels followed by shoreline regression from 9.0–8.0 ka cal BP, and anthropogenic indicators (charcoal, Cerealia-type pollen and coprophilous fungi) attesting deforestation, soil erosion and cultivation during Neolithic phases. Sedimentological evidence also reveals the transition from wetlands to floodplain environments, shaped by increased terrigenous inputs and fluvial activity.

Together, these records highlight the interplay between volcanism, climate variability and human impact in shaping NE Iberian landscapes across different temporal scales. By integrating different archives, this research underscores the value of multi-proxy sedimentary sequences for understanding both long-term environmental dynamics and the emergence of human-modified landscapes in the region.

Proponente: Alessandro Fontana