Motivation

In the framework of the GeoPlaNet project, we took advantage of the broad and multidisciplinary consortium of the Erasmus + Strategic Partnership to organize a school addressing two of the most basic and important aspects of planetary geology: geological mapping and analog studies. The goal is to use innovative training techniques as well as basic geological concepts to bridge the gap between planets and Earth environments and scales.

Course topics

The school will develop in two distinct but thoroughly connected phases, the first focused on planetary data processing and geological mapping and the second aimed at the observation, understanding, and critical comparison of potential Earth analogs.

These topics will be addressed both with theoretical lectures and practical sessions aimed at immediately applying the learned concepts:

- Planetary data processing using ISIS (Integrated Software for Imagers and Spectrometers)
- DEMs production using ASP (NASA Ames Stereo Pipeline)
- Data ingestion in a GIS environment and planetary geological mapping: concepts and practice on selected examples on Mars and the icy satellites
- Geological sections and stratigraphic reconstructions
- Field trips on potential analogs of some of the depositional settings mapped in the planetary counterparts
- Data ingestion, processing, and integration for photogrammetric reconstructions.
- Data analysis in Virtual Reality.

Logistics

The first week between September 26th and October 1st will be held in Pescara at the University d'Annunzio. The travel to Pescara will be autonomous. The information on accommodation will be provided to the participants in due time. On October 2nd the school will move to Predazzo (TN), where the accommodation will be booked by the organization. On October 9th the participants will be guided back to Pescara and the travel back home will be autonomous, with the possibility to be taken to Padova, or to Venezia/Bologna airports.

Contacts

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