Hellenistic Necropolis of Neapolis exploration with muography

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Muographers2023
Neapolis about 2500 years ago
Ancient Greek and Roman cultural layer of Neapolis was covered later by eruptions and alluvions and completely forgotten.
Starting from XVI century active urbanization started in this region and some Greek and Roman constructions was accidentally revealed.

Ancient Greek and Roman layers nowadays stay about 10 m below the street level under the highly populated Napoli districts.

Regular invasive archeology is generally not possible here.
Ancient Hellenistic Necropolis under the Sanita’ district of Naples
Napoli - Via Santa Maria Antesaccula, 126.
Ipogeo dei “Melograni” Camera inferiore - Parete est
Emulsion plates of $25 \times 30 \ cm^2$
The street surface now

IV sec B.C.

28 days data accumulation
Two 0.15 m² detectors
Emulsion analysis laboratory at INFN-Napoli: 7 scanning systems

Neutrino and HNL, Medical Physics, Dark Matter search, Muon Radiography
Laser survey performed to create a 3D digital model of all accessible underground spaces