5 Mid - Volcanology in Roma

Excursion Leaders: Danilo M. Palladino (Sapienza-University of Rome), Mario Gaeta (Sapienza-University of Rome), Fabrizio Marra (INGV-Rome)

Proposed Excursion Dates: Sunday, 16th July 2023

Draft Itinerary: Rome-Tuscolo-Marino-Albano Lake-Ciampino-Rome

Definitive cost per head: €90

Minimum number of participants: 25

Maximum number of participants: 35

Proposer Contact Details: danilo.palladino@uniroma1.it

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Description

The Colli Albani: a quiescent volcano on the outskirts of Rome

The Colli Albani volcano, at the gates of Rome, erupted since ~600 ka until at least 36 ka. Given the long dormancies (~38 kyr on average) occurred during its activity history, the volcano has to be considered as quiescent. InSAR data in the last 20 yrs reveal ongoing inflation with maximum uplift rates >2mm/yr in the area hosting the most recent eruptive vents, suggesting that magma recharge is possibly occurring at depth. Despite quite peculiar (high-K2O, low-SiO2) magma composition, volcanic activity comprised a full range of eruptive styles, from effusive to highly explosive, caldera-forming, pyroclastic flow events. During the excursion, we will cross the Roman Campagna pyroclastic plateau, then we will climb the volcano flanks up to the Tusculum archaeological park, located on the caldera rim, with commanding views over the whole volcanic area. On the way down to the beautiful Albano maar crater lake, we will visit quarry exposures of the Peperino di Marino, the youngest product of Colli Albani. Heading back to Rome, we will look at a calcite-bearing leucitite lava flow in a quarry next to the ancient Appian Way. The excursion includes full bus transportation, packed lunch and wine tasting in a local wine estate.