

Qubit Metrology, operation and sensing in a Low-Background Environment
14th - 16th October 2025

Workshop webpage: <https://agenda.infn.it/e/MetSuperQ>



1 Overview

The workshop aims to connect researchers from the MetSuperQ EU project with INFN & SQMS scientists working on Qubits performances in a low radioactive environment. This workshop will aim at identifying areas of mutual interest and potential collaboration, particularly in relation to the upcoming round-robin measurements.

This workshop brings together diverse scientific communities to explore the synergy between qubit metrology and qubit-based particle detection in ultra-low background environments.

The workshop will provide a focused forum to address key scientific questions as well as associated operational and logistical challenges. Additionally, it will facilitate trans-Atlantic collaboration through engagement with SQMS scientists, who also utilize the LNGS facility.

2 Venue and Format

The workshop will take place at the Laboratori Nazionali del Gran Sasso (LNGS) located nearby the village of Assergi inside the Gran Sasso - Laga National Park, close to the beautiful city of L'Aquila and approximately 120 kilometers north-east from Rome.

The workshop will take place in-person only. The agenda is online on workshop website. Talks of the first two days are planned to be hosted in the "E. Majorana" room of LNGS, while the last day talks and posters will be hosted in the "B. Pontecorvo" room.

Registration of attendees is planned on the first day at **9:00**.

There will be two daily coffee breaks, one in the morning and one in the afternoon.

The visit of the Underground Labs is planned on the first day at **17:00**.

The social excursion, planned on **Wednesday 15**, will be at the Stiffe's Caverns (<https://grottedistiffeofficial.it/>). and will be followed by the social dinner at the Magione Papale

restaurant (<https://www.magionepapale.it/>).

During the workshop lunch will be available at the LNGS canteen starting from **13:30**. The cost for complete meal is 8 Euro that can be paid cash or by credit card.

3 Shuttle Service

Shuttle buses from Rome airports (Fiumicino and Ciampino) and Rome train stations (Termini and Tiburtina) have been organized. Timetable was sent to the participants who have requested this service. Concerning the trip back to airports / train stations, we will collect confirmation from participants during the workshop.

Please find here below timetable of daily shuttle buses from L'Aquila/Assergi to LNGS.

14th October (Tuesday)

8:00 - L'Aquila, Villa Comunale (stop on Viale Crispi toward XX Settembre)

8:20 - Assergi, B&B Il Parco

8:25 - Assergi, Hotel Fiordigigli

8:30 - Assergi, Hotel Nido dell'Aquila

8:40 - LNGS

Return to Assergi/L'Aquila after the underground laboratory tour

15th October (Wednesday)

8:30 - L'Aquila, Villa Comunale/Viale Crispi

8:50 - Assergi, B&B Il Parco

8:55 - Assergi, Hotel Fiordigigli

9:00 - Assergi, Hotel Nido dell'Aquila

9:10 - LNGS

Return to Assergi/L'Aquila after excursion and social dinner

16th October (Thursday)

8:30 - L'Aquila, Villa Comunale/Viale Crispi

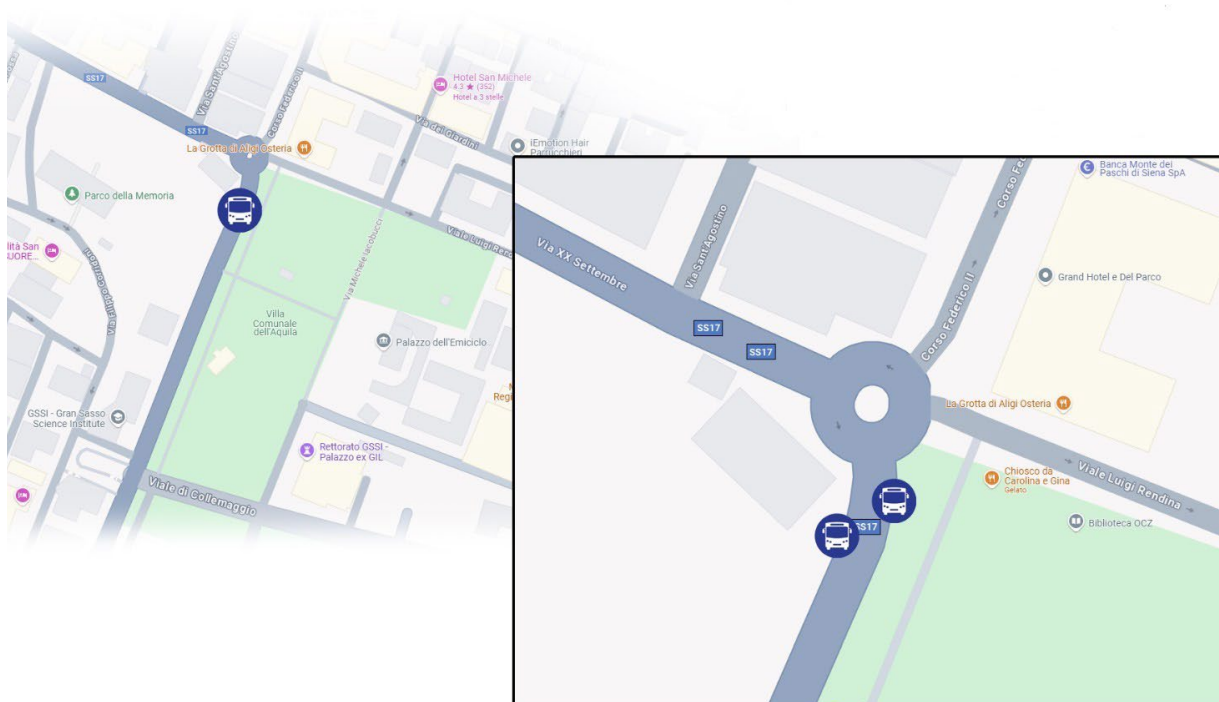
8:50 - Assergi, B&B Il Parco

8:55 - Assergi, Hotel Fiordigigli

9:00 - Assergi, Hotel Nido dell'Aquila

9:10 - LNGS

Return to Assergi/L'Aquila at the end of workshop



A picture and a map of the pick-up point on viale Crispi

For any question or further information concerning transportation please call H-Solution company info line +39 347 8326232 or send an email to reception@h-solution.eu

4 Committees

Scientific Advisory Committee

- Mark Bieler, PTB, Germany
- Laura Cardani, *INFN-Roma1, Italy*
- Emanuele Enrico, *INRIM, Italy*
- Ioan Pop, *KIT, Germany*
- Stefano Pirro, *INFN-LNGS, Italy*

Local Organizing Committee

- **Chair:** Stefano Pirro, *INFN-LNGS, Italy* (stefano.pirro@LNGS.INFN.IT)
- Francesco De Dominicis, *GSSI-INFN-LNGS, Italy* (francesco.dedominicis@GSSI.IT)
- **Secretary:** Fausto Chiarizia, *INFN-LNGS, Italy* (fausto.chiarizia@LNGS.INFN.IT)