

# Join our Labs in Florence, Italy!

# Open Positions

## Postdoc, PhD, Master

*Two electrons are better than one...*

*We have three laboratories dedicated to exploring Quantum Simulation and Computation:*

1. In the **Yb lab**, we trap ultracold Fermi gases in optical lattices to realize quantum simulators of multicomponent Hubbard models and of the Hall effect, with synthetic dimensions and high-resolution optical control.
2. The **Sr Tweezer lab** explores spin models with long-range interactions and multi-partite entanglement in the first Italian programmable array of Rydberg Strontium atoms in optical tweezers.
3. Quantum computation will be explored in the **Yb Tweezer lab**, leveraging programmable optical tweezers for operating arbitrary gate sequences and Rydberg interactions for fast gate switching.

To learn more and join us, visit [www.quantumgases.lens.unifi.it](http://www.quantumgases.lens.unifi.it) and contact:

Prof. Leonardo Fallani ([leonardo.fallani@unifi.it](mailto:leonardo.fallani@unifi.it)),

Dr. Vladislav Gavryusev ([vladislav.gavryusev@unifi.it](mailto:vladislav.gavryusev@unifi.it))

Dr. Luca Tanzi ([tanzi@lens.unifi.it](mailto:tanzi@lens.unifi.it))

