Shaping quantum future

SQUASH, the Slovenian Quantum Science Hub, is an innovative intersectoral training and career development program led by the "Jožef Stefan" Institute, involving a large group of prestigious partner organizations from Slovenia, the EU, and beyond. The program offers opportunities for career mobility and top-notch training in scientific and transferable skills.

VISION: To improve research excellence

and competitiveness in the field of quantum sciences and technologies, and to become a leading player in the international

environment

GOAL: To develop a qualified and

innovative workforce for research in quantum sciences and technologies, as well as for

academic circles

FOUNDATIONS: Interdisciplinarity, intersectoral

collaboration, internationality

DURATION: 2025–2030

VALUE: 11,52 mio. €

(EU: 5,73 mio. €, MVZI: 5,79 mio. €)

HOW TO REACH THE GOAL:

- A three-year employment of 40 top postdoctoral researchers from around the world,
- Providing a stimulating and highly competitive work environment,
- Conducting cutting-edge research and being open to new research directions,
- Training programs for acquiring new knowledge and skills, as well as rapid career development.

Coordinator:

Assoc. Prof. Dr. Andrej Zorko, JSI, FMF

Deputy Coordinator:

Assoc. Prof. Dr. Lev Vidmar, JSI, FMF

Project Manager:

MSc Maja Razpotnik, JSI

More information: squash.ijs.si Contact: squash@ijs.si



Programme's Beneficiary

Implementing partner

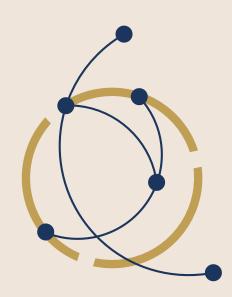




The program is co-funded by the Marie Skłodowska-Curie Actions, call HORIZON-MSCA-2023-COFUND-01-01, contract number: EU: GAP-101177446, and the Ministry of Higher Education, Science, and Innovation of the Republic of Slovenia.







SOUASH

Slovenian Quantum Science Hub



Shaping quantum future

We will conduct <u>pioneering research</u> to address the upcoming technological challenges of the second quantum revolution.

Postdoctoral researchers will have the opportunity to develop their own research in one of the $\frac{4 \text{ fields}}{59 \text{ potential}}$ mentors.



QUANTUM THEORY

- · Quantum many-body physics
- Quantum at high energy
- Theory of quantum materials, gases, and subatomic particles



QUANTUM MATERIALS

- · Quantum magnetism
- Ouantum nanomaterials
- Advanced quantum materials



OUANTUM TECHNOLOGY

- Hybrid quantum devices
- · Optical trapping technologies
- Exploiting quantum effects on micrometer and nanometer scales



QUANTUM COMPUTING AND INFORMATION

- Qubit platforms
- Quantum calculations and simulations
- Quantum information

Building a network of partners

