

# 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 M €  
(EU: 5.73 M €, MVZI: 5.79 M €)

## 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](http://squash.ijs.si)  
Contact: [squash@ijs.si](mailto:squash@ijs.si)



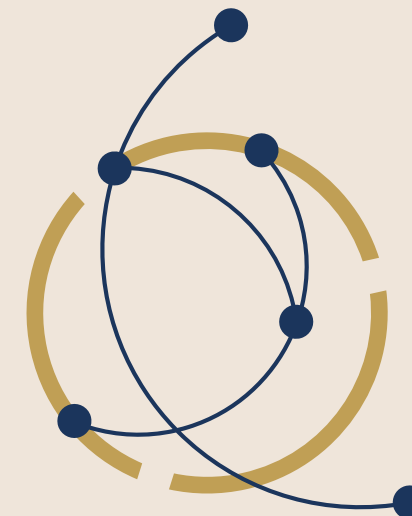
Programme's Beneficiary



Implementing partner



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# SQUASH

Slovenian Quantum Science Hub



## Shaping quantum future

We will conduct pioneering research 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 4 fields of quantum science under the guidance of 59 potential mentors.



### QUANTUM THEORY

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



### QUANTUM MATERIALS

- Quantum magnetism
- Quantum nanomaterials
- Advanced quantum materials



### QUANTUM 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

