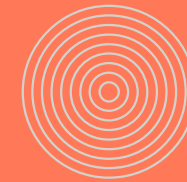
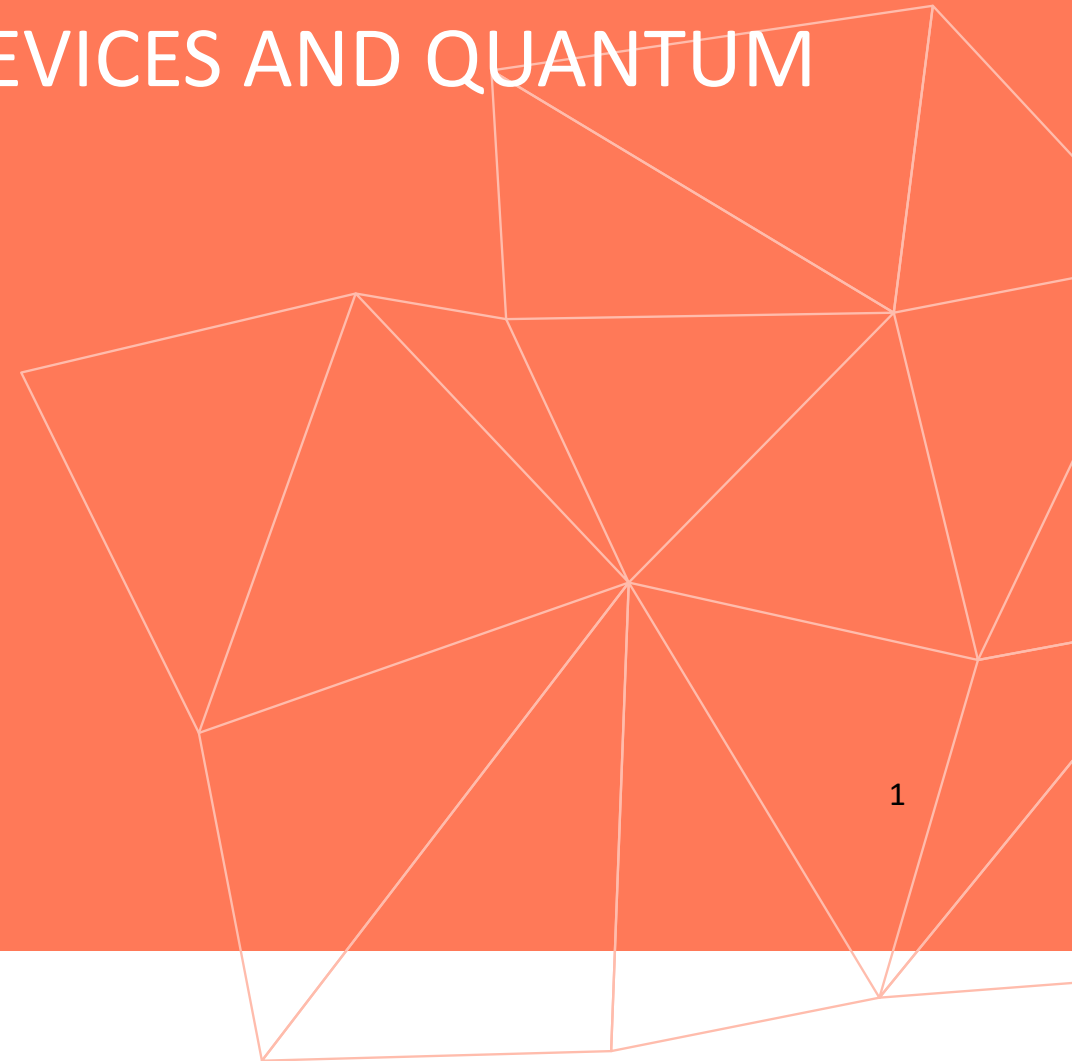


Action Chair, Hermann Suderow

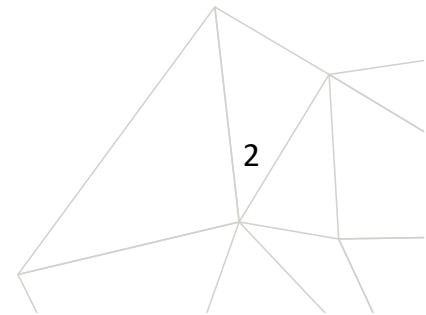


SUPERCONDUCTING NANODEVICES AND QUANTUM MATERIALS FOR COHERENT MANIPULATION

SUPERQUMAP



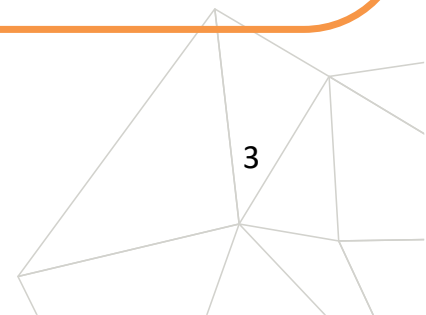
Propuesta



Action challenge



The challenge addressed by SUPERQUMAP is to harness the results obtained recently in superconductivity and build a collaborative effort to provide radically new approaches to superconducting based quantum devices.



Action challenge


Research Coordination objectives


Capacity Building objectives

Deliverables




Action Details

 MoU - 058/22

 CSO Approval date - 27/05/2022

 Start date - 06/10/2022

 End date - 05/10/2026

 <https://superqumap.eu/>

How can I participate?

- Read the Action Description [MoU](#)
- Inform the Main Proposer/Chair of your interest ([email](#))
- [Apply](#) to join your Working Groups of interest
- Please note, Management Committee nominations are carried out through the [COST National Coordinators](#)



NO connection between proponents and proposal NO links to web pages or through references to their role and/or participation in existing or ended projects, grants, networks that are mentioned in the proposal.



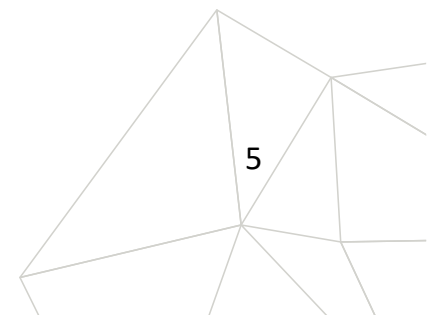
The proposal contains statements making proposers potentially identifiable through references to their participation in other projects, networks and through their membership in organisations.

According to our rules, the breach of the anonymity criterion is constituted by reference to the “role and/or membership in organisations and/ or networks”, irrespective of the size of the organisation, projects, grants etc.

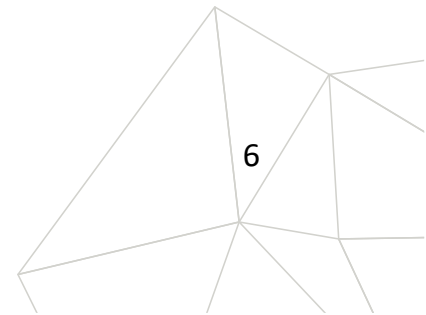
Muchas gracias
Almudena, Noelia Y SG
😊

In section 2.B of the Technical Annex, it is stated that “The members of the Network of Proposers are major actors in European, national and regional ongoing research projects in the field. Among the network of proposers, there are eleven ERC grantees, coordinators or major partners in EIC pathfinder projects, stakeholders or coordinators of major research initiatives in the field of quantum technology Europe wide (chips act and quantum flagship) and at the national level (e.g. in Italy, Finland-Finnish quantum flagship, France-PEPR Spin France or QuantiP, the Netherlands-Dutch consortium quantum limits, etc). There are also numerous regional initiatives, and many proponents belong to institutes that are recognized as units of excellence”. Hence, the proposal establishes an indirect link between network members and initiatives, which constitutes a breach of our eligibility rules, regardless of the size of these initiatives.

>150M€
>decenas de grupos



Acción

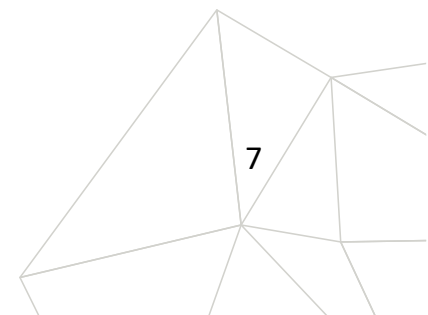


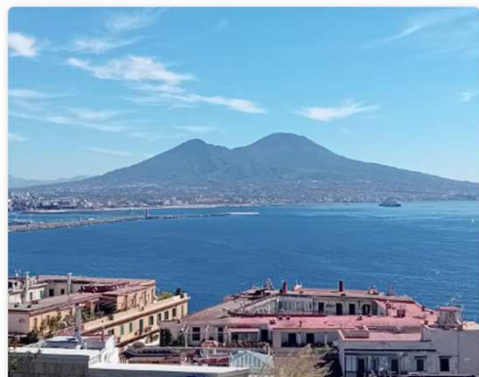
Planning ANUAL



COST Action CA21144 Annex A of the Grant Agreement from 2025-11-01 to 2026-10-05

Networking Tools	Quantity	Budget
Meetings	4	EUR 147 200.00
Training Schools	0	EUR 0.00
Mobility of Researchers and Innovators	tbd.	EUR 9 600.00
Presentation at Conferences organised by Third Parties	tbd.	EUR 2 625.00
Dissemination and Communication Products	1	EUR 400.00
Other Expenses Related to Scientific Activities (OERSA)	1	EUR 200.00
Total Science Expenditure		EUR 160 025.00
Financial and Scientific Administration and Coordination (FSAC) - MAX. 15%	15 %	EUR 24 003.75
Total Grant Request		EUR 184 028.75





[MEETINGS](#) [NEWS](#)

International Conference on Superconducting Nanodevices and Quantum Materials for Coherent Manipulation

on May 25

SCOPE Quantum computation thrives in part thanks to the insight won in [...]

[Read more →](#)



[EVENTS](#) [MEETINGS](#) [NEWS](#)

2nd European Meeting on Superconductivity and Magnetism in Quantum Materials, Braga, 6–9 July 2026

on May 21

SCOPE Superconducting and magnetic quantum materials are rapidly emerging as essential building [...]

[Read more →](#)



[MEETINGS](#) [NEWS](#)

Emergent phenomena in quantum materials and devices for unconventional superconducting systems – Twente (The Netherlands) 8–10th June, 2026

on Mar 31

Program, download here. List of invited speakers: Aguado, Ramón, MadridAnahory, Yonathan, JerusalemBanerjee, [...]

- Organizador principal local, idealmente un grupo muy activo.
- Propuestas de un comité con 3-4 del MC y miembros externos a la acción y del MC.
- Se escogen charlas. Miembros de MC solo 1-2 veces en toda la acción (¡cuidado ITC!). Participación de jóvenes, incluso para impartir conferencias invitadas.
- Diversidad de destinos.
- Ambiente relajado y fomento de discusiones.



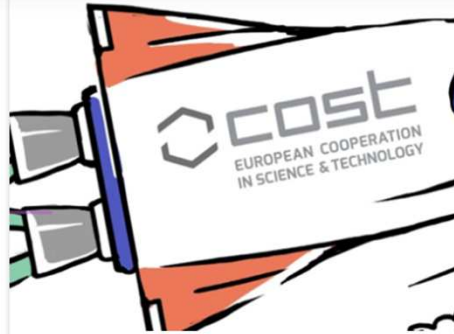
[CONFERENCE GRANTS](#) [NEWS](#)
[SCIENTIFIC MISSIONS](#)

Short-Term Scientific Missions, ITCG and YRIG Grants available! Deadline for applications 17th of September 2026

on Sep 15

Short-term scientific missions (STSM) are visits of researchers based in a home [...]

[Read more →](#)



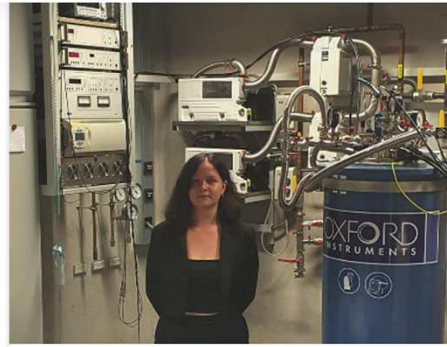
[NEWS](#) [SCIENTIFIC MISSIONS](#)

Short-Term Scientific Missions, ITCG and YRIG Grants available! Deadline for applications 17th of September 2026

on Dec 22

Short-term scientific missions (STSM) are visits of researchers based in a home [...]

[Read more →](#)



[NEWS](#) [SCIENTIFIC MISSIONS](#)

STSM of Stanislava Shpilinska (University of Vienna, Austria) at the Goethe University (Germany): Nanoengineered superconductors for high-velocity vortex dynamics

on Dec 13

The aim of this short-term scientific mission (STSM) was to characterize superconductor-based [...]

[Read more →](#)

- Estancias de semanas a meses, en Europa, EEUU, etc.
- Comité decide por aportaciones a la acción y otros criterios (joven, gender, ITC).
- Fomento de jóvenes, tesis, grandes instalaciones, etc.
- Favorecer ITC (pero cuidado).



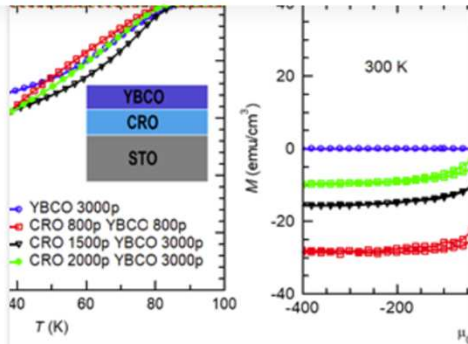
[CONFERENCE GRANTS](#) [NEWS](#)
[SCIENTIFIC MISSIONS](#)

Short-Term Scientific Missions, ITCG and YRIG Grants available! Deadline for applications 17th of September 2026

on Sep 15

Short-term scientific missions (STSM) are visits of researchers based in a home [...]

[Read more →](#)



[CONFERENCE GRANTS](#) [NEWS](#)

ITC Conference Grant of Alina Marinela Ionescu at EUCAS 2023 (Bologna, Italy)

on Nov 27

ITC CG for participating at EUCAS 2023 with the oral presentation entitled [...]

[Read more →](#)



[CONFERENCE GRANTS](#) [NEWS](#)

ITC Conference Grant of Igor Bogus at the 8th International Conference on Superconductivity and Magnetism (Turkey)

on Nov 27

The conference took place at the picturesque resort of Ölüdeniz surrounded by [...]

[Read more →](#)

- ITC Conference and YRG grants.
- Participación en reuniones de sociedades y de organizaciones globales (muy importante).
- Jóvenes e ITC limita el scope and da sentido en el ámbito de COST.

Low-Temperature Quantum Detectors

EVENTS MEETINGS NEWS

Low-Temperature Quantum Detectors: from fundamentals to applications – Helsinki (Finland) 3-6th August, 2025

July 15, 2025

[Read more...](#)



30th International Conference on Low Temperature Physics

7-13 August 2025, Bilbao, Spain

EVENTS MEETINGS NEWS

Superqumap at It30!

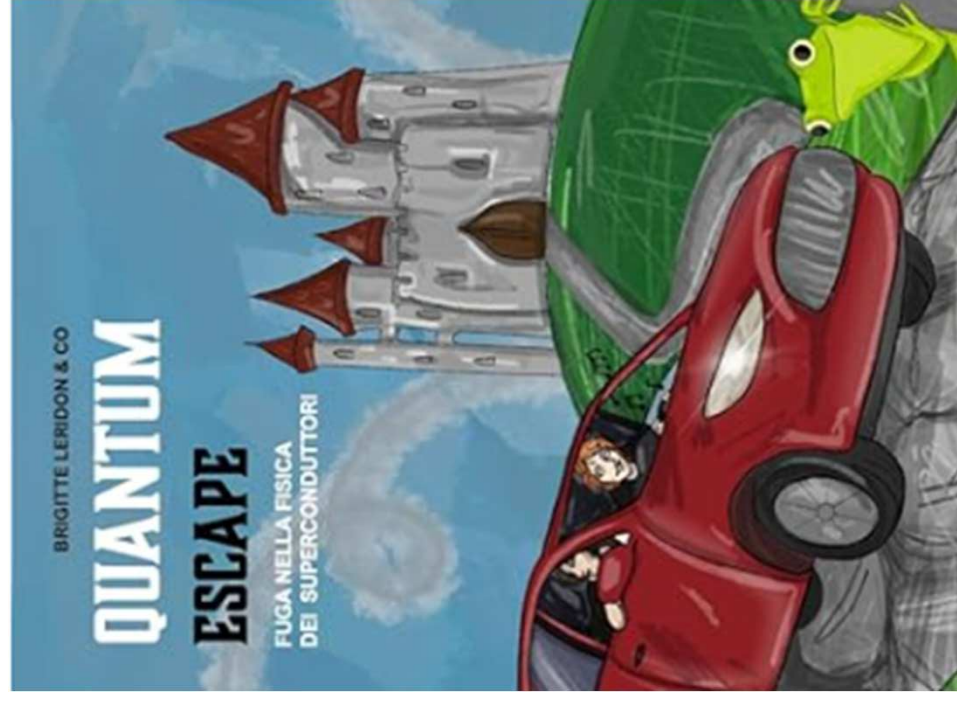
June 3, 2025

[Read more...](#)

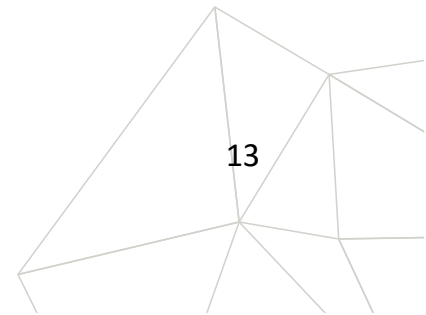
>1000 participantes de todo el mundo

HAY QUE LEERSE
ANNOTATED RULES

Pero COST es **flexible** y estudia seriamente y acepta y apoya propuestas e ideas claramente positivas para la acción y para COST.



Impacto



Advanced Materials Line: Relevant projects



Meetings



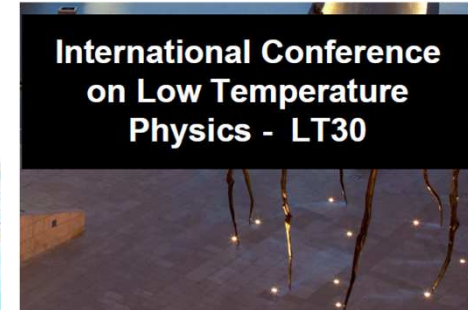
EVENTS MEETINGS



EVENTS MEETINGS



EVENTS MEETINGS



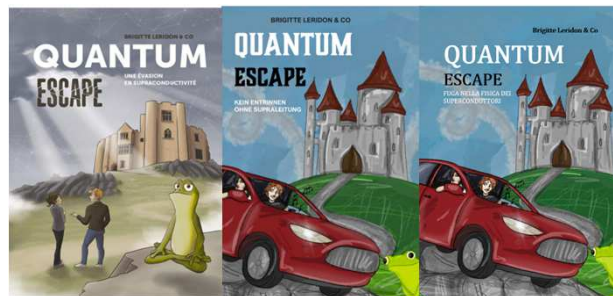
INTERNATIONAL YEAR OF Quantum Science and Technology

100 years of quantum is just the beginning.

Supported:

- 20 international conferences
- 2 schools
- 116 visiting grants
- 678 researchers
- 500+ publications

250 k€ budget till October '26

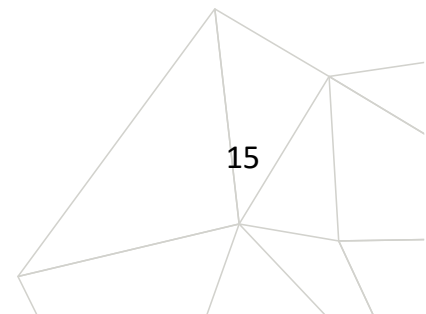


H. Suderow
1.5 M€
2017 - 2022
2022 - 2026

Lo peor



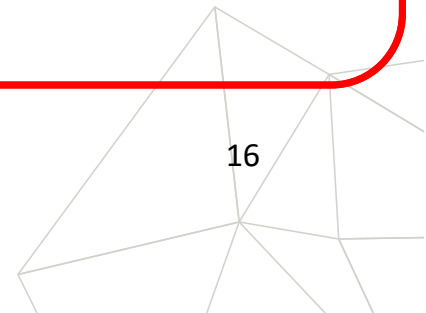
- Esto no “da de comer”, es un **servicio a la comunidad**.
- 15% FSAC (íntegro a GHM, Irene González), **0% overheads**.
- Presupuesto anual variable. No hay un **presupuesto multianual** asegurado.
- **Falta de apoyo institucional**, incluso a nivel de Dpto (clases al completo, tareas de gestión, ausencia de apoyo administrativo).
- Ausencia de **convocatorias** nacionales para **fomentar colaboraciones** (no es así en otros países).



Lo peor: como mejorarlo



- Sustituir FSAC, **por contratación de GHM y overheads**, forzando el reconocimiento del trabajo.
- Establecer un **presupuesto de base** para cada uno de los cuatro años.
- Convocatoria de **fortalecimiento de relaciones internacionales**:
 - Presupuesto que proporcione **fungible para estancias** (asociarlo a un número de STSM) que se distribuya a nivel estatal (consecución de objetivos del COST).
 - Incentivar participación conjunta en Synergy, Pathfinder o Capacities **forzando presentación de propuestas**.
 - Asociarlo a iniciativas como **SO y MdM**.



Lo mejor

- “Honor” de realizar un servicio **pleno** y desinteresado.
- Físicos **jóvenes brillantes** *conectados*.
- **Aprendizaje personal** en las reuniones.
- **Colegas** que obtienen *ERC* (numerosos en MC) o *Pathfinder*.
- *Evolución* de investigadores de ITC (COST **fomenta la perseverancia**).
- **Nuevas colaboraciones** (incluso China, EEUU, Japón, ...).
- **Nuevos resultados** a menudo en *primicia*.

