

QuantERA Call 2023

Projects recommended for funding

Important: The final funding decision will depend on national regulations of the funding organisations.

Call topic: Quantum Phenomena and Resources (QPR)		
Acronym & Title of the Project	Coordinator/Institution & Country	Funding organisations
AQuSeND: Advanced Quantum Sensing with NanoDiamonds	Adam M. Wojciechowski Jagiellonian University in Krakow Poland	NCN (Poland), DFG (Germany), AEI (Spain)
ClusStaR: Large-scale cluster states as a flexible resource for quantum information processing	Jonas Neergaard-Nielsen Technical University of Denmark Denmark	IFD (Denmark), NQSTI (Italy), MEYS (Czechia)
COMPUTE: nonCommutative polynOMial oPtimisation for qUanTum nEtworks	Renou Marc-Olivier Centre de recherche Inria de Saclay France	ANR (France), DFG (Germany), AEI (Spain), MIZS (Slovenia)
CoQuaDis: Collective quantum phenomena in dissipative systems – towards time-crystal applications in sensing and metrology	Igor Lesanovsky University of Tuebingen Germany	DFG (Germany), AEI (Spain), VR (Sweden)
EIQuRes: Electronic Quantum Resources	Vyacheslavs Kashcheyevs University of Latvia Latvia	LZP (Latvia), DFG (Germany), ANR (France)
FIGAnti: Fibre-Coupled GaSb Quantum Dot Tunable Single-Photon Sources for Field Deployed Quantum Key Distribution	Anna Musial Wroclaw University of Science and Technology Poland	NCN (Poland), DFG (Germany), AKA (Finland), ANR (France), VR (Sweden)
GeMOS: Germanium MOSFETs for quantum computation	Peter Stano Institute of Physics Slovak Academy of Sciences Slovakia	SAS (Slovakia), DFG (Germany), SNSF (Switzerland)
MOLAR: MOlecular Lattice Quantum ElectRodynamics	Alejandro Gonzalez-Tudela Consejo Superior de Investigaciones Cientificas Spain	AEI (Spain), ANR (France), MEYS (Czechia)
OPTRIBITS: Optically Addressable Trityl-Radical-Based Molecular Qubits	Joris van Slageren University of Stuttgart Germany	DFG (Germany), FWO (Belgium), AEI (Spain)

QNet: Transport, metastability, and neuromorphic applications in quantum networks	Tijjana Ban Institute of Physics Croatia	HRZZ (Croatia), DFG (Germany), AEI (Spain), AKA (Finland), SNSF (Switzerland)
QRADES: Quantum relic axion detection sensors	Takis Kontos Laboratoire de Physique de l'ENS France	ANR (France), DFG (Germany), AEI (Spain), AKA (Finland)
QuCABOoSE: Quantum Coherence Activation By Open Systems and Environments	Katarzyna Roszak Institute of Physics, Czech Academy of Sciences Czechia	MEYS (Czechia), DFG (Germany), NQSTI (Italy), NCN (Poland)
ResourceQ: Unifying and Optimising Resources for Quantum Computation	John Selby International Centre for Theory of Quantum Technologies, University of Gdansk Poland	NCN (Poland), DFG (Germany), ANR (France)
SiCqurTech: Silicon Carbide Qubits towards a Fab-Ready Technology	Florian Kaiser Luxembourg Institute of Science and Technology Luxembourg	FNR (Luxembourg), DFG (Germany), QDNL (Netherlands), SNSF (Switzerland)
TouQan: Towards a useful quantum advantage	Alvaro Alhambra Instituto de Fisica Teorica UAM / CSIC Spain	AEI (Spain), DFG (Germany), ANR (France), NCN (Poland)

Call topic: Applied Quantum Science (AQS)

Acronym & Title of the Project	Coordinator/Institution & Country	Funding organisations
COMPHORT: Quantum Communications with bright solid-state single-Photon emitters at Room Temperature	Carlos Antón Solanas Universidad Autonoma de Madrid Spain	AEI (Spain), VDI/TZ (Germany), EPSRC (United Kingdom), TÜBITAK (Türkiye)
EQSOTIC: Enhanced Quantum Dot Sources and Optical Atomic Memories for Telecommunication InterConnectivity	Patrick Ledingham University of Southampton United Kingdom	EPSRC (United Kingdom), VDI/TZ (Germany), IFD (Denmark)
EXTRASENS: Color centers in diamond nanoneedles for intra- and EXTRA-cellular quantum SENSing	Polina Kuzhir University of Eastern Finland Finland	AKA (Finland), VDI/TZ (Germany), LMT (Lithuania), NCBR (Poland), TACR (Czechia)
HSM-QCC: Hardware Security Module for secure delegated Quantum Cloud Computing	Pepijn Pinkse University of Twente Netherlands	QDNL (Netherlands), VDI/TZ (Germany), ANR (France), NKFIH (Hungary), EPSRC (United Kingdom)

MEEDGARD: Memory-Enhanced Entanglement Distribution with Gallium ARsenide quantum Dots	Dorian Gangloff University of Oxford United Kingdom	EPSRC (United Kingdom), VDI/TZ (Germany), FFG (Austria), NCBR (Poland)
PROTEQT: Protection of quantum information in small clusters of qubits	Michael Stern Bar Ilan University/BIRAD Israel	InnovationAuth (Israel), ANR (France), EPSRC (United Kingdom)
QISS·ME: All-Silicon Quantum Key Distribution Circuits for Monolithic Datacenter Engines	Mariana Ramos AIT Austrian Institute of Technology, GmbH Austria	FFG (Austria), VDI/TZ (Germany), InnovationAuth (Israel)
QM3: Quantum Multi-Modal Microscopy	Radek Łapkiewicz University of Warsaw Poland	NCBR (Poland), VDI/TZ (Germany), ANR (France), SNSF (Switzerland)
V-MAG: Vector light enhanced atom magnetometry	Sonja Franke-Arnold University of Glasgow United Kingdom	EPSRC (United Kingdom), VDI/TZ (Germany), ANR (France), NKFIH (Hungary)

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement no 101017733

