

QuantERA Call 2017

Projects Recommended for Funding

The projects listed below are recommended for funding to the national research funding organisations of QuantERA by the Call Steering Committee of QuantERA Call 2017.

<u>Important:</u> The final funding decision will depend on national regulations and inspection of the formal proposals to be submitted to the national funding organisations. Each national funding agency will then take a formal decision on the projects to be supported.

No.	Acronym & Title of the Project	Coordinator/Institution	Countries in Partnership (in bold, coordinating country)
1.	CEBBEC: Controlling EPR and Bell correlations in atomic Bose-Einstein condensates	Christoph Westbrook Institut d'Optique, Laboratoire Charles Fabry	Austria, France , Germany, Italy, Spain
2.	CUSPIDOR: CMOS Compatible Single Photon Sources based on SiGe Quantum Dots	Thomas Fromherz Johannes Kepler University, Institute of Semiconductor and Solid State Physics	Austria , Czech Republic, Ireland, Italy
3.	ERyQSenS: Entangled Rydberg matter for quantum sensing and simulations	Markus Hennrich Stockholm University	Bulgaria, France, Germany, Sweden , UK
4.	HiPhoP: High dimensional quantum Photonic Platform	Pascale Senellart CNRS Center For Nanoscience and Nanotechnology	Austria, France , Italy, Slovakia
5.	HYPER-U-P-S: Hyper-entanglement from ultra-bright photon pair sources	Ana Predojevic Stockholm University	Austria, Czech Republic, Denmark, Germany, Sweden
6.	InterPol: Polariton lattices: a solid- state platform for quantum simulations of correlated and topological states	Marzena Szymanska University College London, Department of Physics and Astronomy	France, Germany, Israel, Poland, UK
7.	MICROSENS: Microwave quantum sensing with diamond color centers	Thierry Debuisschert Thales Research and Technology	Austria, France , Germany
8.	NanoSpin: Spin-based nanolytics – Turning today's quantum technology research frontier into tomorrow's diagnostic devices	Jens Anders University of Ulm, Institute of Microelectronics	Belgium (Flanders), Czech Republic, Germany , Hungary, Netherlands



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9.	NAQUAS: Non-equilibrium dynamics in Atomic systems for QUantum Simulation	Jérôme Beugnon Laboratoire Kastler Brossel	France , Germany, Italy, Poland, Switzerland, UK
10.	ORQUID: ORganic QUantum Integrated Devices	Costanza Toninelli National Institute of Optics	France, Germany, Italy, Netherlands, Poland, Spain, UK
11.	Q-Clocks: Cavity-Enhanced Quantum Optical Clocks	Filippo Levi Istituto Nazionale di Ricerca Metrologica	Denmark, France, Italy, Poland, Spain
12.	Q_Magine: Scalable Electrically Readout Diamond Spin Qubit Technology for Single Molecule Quantum Imagers	Milos Nesladek University Hasselt, Dept. Physics, Institute for Materials Research	Austria, Belgium (Flanders) , Germany, Hungary
13.	QCDA: Quantum Code Design and Architectures	Earl Campbell University of Sheffield	France, Germany, Netherlands, UK
14.	QTFLAG: Quantum Technologies For LAttice Gauge theories	Simone Montangero Saarland University	Austria, Germany, Italy, Poland
15.	QuantAlgo: Quantum algorithms and applications	Jérémie Roland Université Libre de Bruxelles	Belgium, Denmark, France, Latvia, Netherlands, UK
16.	QUANTOX: QUANtum Technologies with 2D-Oxides	Marco Salluzzo SuPerconducting and other INnovative materials and devices institute SPIN	France, Israel, Italy, Netherlands, Spain, Sweden
17.	QuaSeRT: Optomechanical quantum sensors at room temperature	Francesco Marin Dipartimento di Fisica e Astronomia, Università di Firenze	Austria, France, Germany, Italy , Netherlands, Norway
18.	QuompleX: Quantum Information Processing with Complex Media	Mehul Malik Institute for Quantum Optics and Quantum Information	Austria , Italy, Netherlands



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19.	RouTe: Towards Room Temperature Quantum Technologies	Thomas Ebbesen University of Strasbourg & CNRS/ISIS	Finalnd, France , Germany, Poland, Spain, Switzerland
20.	Si QuBus: Long-range quantum bus for electron spin qubits in silicon	Lars Schreiber RWTH Aachen University	France, Germany , Netherlands, Poland
21.	SQUARE: Silicon Photonics for Quantum Fibre Networks	Karsten Rottwitt Technical University of Denmark, Department of Photonics Engineering	Denmark , France, Italy, Turkey, UK
22.	SUMO: Scaling Up quantum computation with MOlecular spins	Fernando Luis CSIC Instituto de Ciencia de Materiales de Aragón	Austria, Germany, Italy, Spain , UK
23.	SuperTop: Topologically protected states in double nanowire superconductor hybrids	Szabolcs Csonka Budapest University of Technology and Economics, Department of Physics	Denmark, France, Hungary , Italy, Netherlands, Switzerland
24.	TAIOL: Trapped Atom Interferometers in Optical Lattices	Franck Pereira dos Santos Observatoire de Paris, SYRTE	France, Germany, Italy, Poland
25.	TheBlinQC: Theory Blind Quantum Control	Florian Mintert Imperial College, Physics Department	Austria, Czech Republic, Germany, Poland, Portugal , UK
26.	Topoquant: 2D hybrid materials as a platform for topological quantum computing	Klaus Ensslin ETH Zurich, Physics Department	Denmark, Germany, Sweden, Switzerland

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