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QuantERA ERA-NET Cofund in Quantum Technologies – Calls for proposals (2017 & 2019)

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Information about the Programme QuantERA ERA-NET Cofund

- QuantERA is a network of 32 organisations from 26 countries, coordinated by the National Science Centre, Poland, supporting international research projects in the field of Quantum Technologies (QT).
- QuantERA answers the growing need for collaborative endeavours and common funding scheme within QT research, which due to its highly interdisciplinary nature cannot be confined to an individual institution or state.
- Through coordination of national and regional research funding programmes QuantERA avoids the problem of fragmentation of national efforts, encouraging transnational collaborations and leveraging Europe's competitive advantage.
- Joint call for proposals for international research groups operating in QuantERA partner countries will become the first step to further integration.
- **In 2016:** the MEYS (MŠMT) is member of QuantERA
- **In 2017:** the MEYS has been involved to Call „*Quantum Information and Communication Technologies*“
- **In 2019:** the MEYS will join to Call „*Quantum Technologies*“
- **Condition:** financial commitment, clear role of the provider, sign the Grant and Consortium Agreement and Memorandum of Understanding (2017; 2019)
- **Contact person:** **Monika Kocmanová** (Member of the Department of Research and Development of the MEYS)

Timeline QuantERA Call 2017

- **Thematic scope of proposals:**
 - » Quantum communication
 - » Quantum simulation
 - » Quantum computation
 - » Quantum information sciences
 - » Quantum metrology sensing and imaging
 - » Novel ideas and applications in quantum science and technologies
- **Funding: EUR 36 M**

13. 1. 2017

**Call
Announcement**

15. 3. 2017

**Pre-proposals
deadline**

11. 7. 2017

**Full proposals
deadline**

22. 11. 2017

Ranking list

1/2018

Funded projects

**SAB
2. – 3. 5.
2017**

**CSC
17. 5.
2017**

**SAB
17. – 18.
10. 2017**

**CSC
27. 10.
2017**

Reporting

Results of the QuantERA Call 2017

Pre Proposals

221 submitted pre-proposals (1087 applicants)

Total requested funding: > EUR 235 M

Úspěšnost
11,8%

Full proposals

91 submitted full proposals (430 applicants)

Total requested funding: > EUR 107 M

Funded projects

26 projects (128 partners)

Total requested funding: > EUR 32 M

Success of Czech applicants

Pre Proposals

221 submitted pre-proposals

CZ: 22 pre-proposals (10%)

Úspěšnost
18%

Full proposals

91 submitted full proposals

CZ: 10 full proposals (11%)

Recommended projects

26 projects

CZ: 4 projects (15%)

Funded projects: Czech Republic

- **CUSPIDOR (CMOS Compatible Single Photon Sources based on SiGe Quantum Dots)**
 - **Petr Klenovský, Masaryk University Brno**
 - **Goal:** Develop a novel integrated photonic platform relying on a fully CMOS-compatible technology, which will provide compact and highly efficient sources of deterministic single photons at telecommunications wavelengths.

- **HYPER-U-P-S (Hyper-entanglement from ultra-bright photon pair sources)**
 - **Miroslav Ježek, Palacký University Olomouc**
 - **Goal:** Fabricate and exploit an entirely novel photonic device platform for the generation of highly indistinguishable and entangled photon pairs with near-unity extraction efficiency.

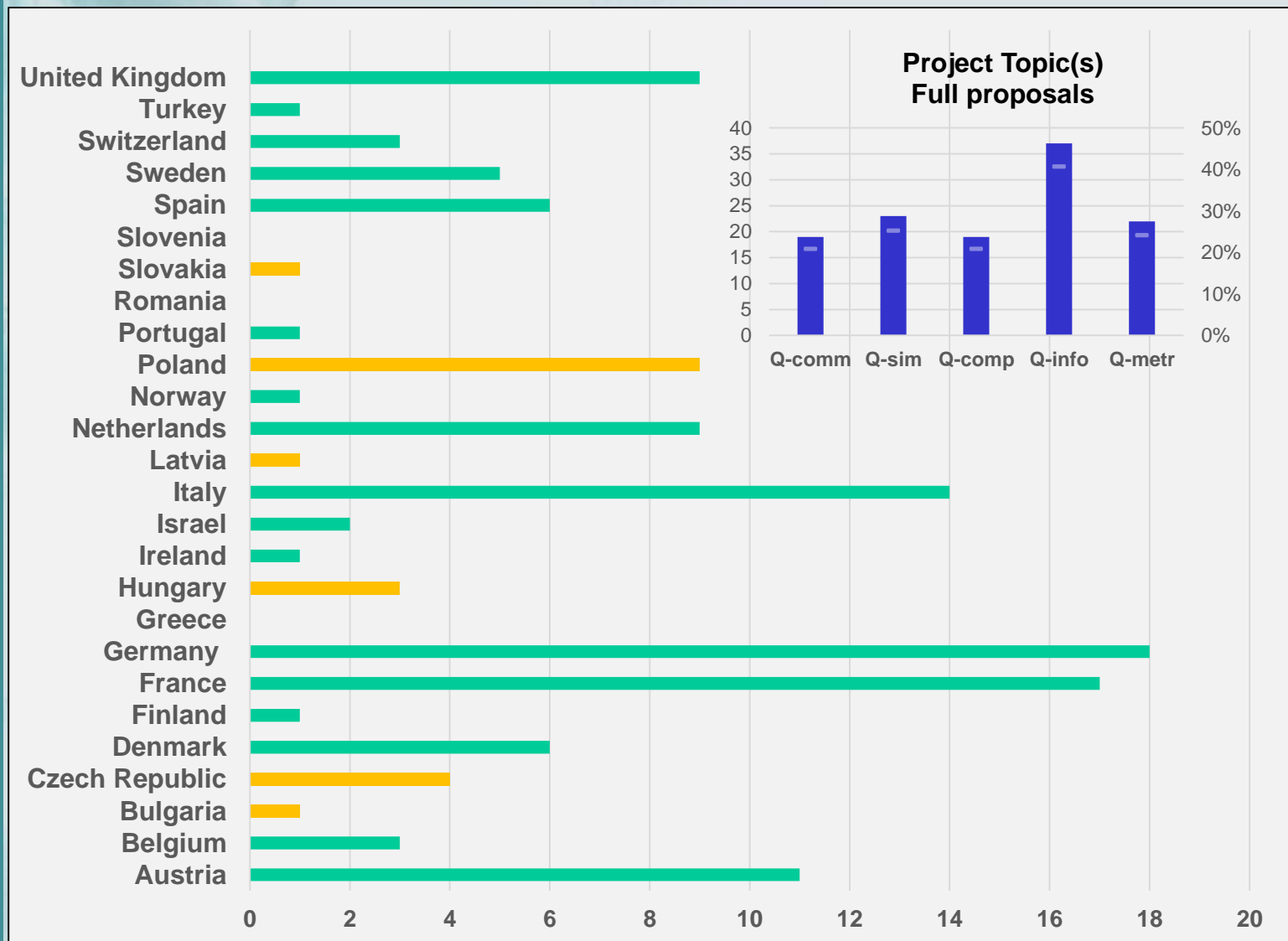
- **NanoSpin** (Spin-based nanolytics – Turning today's quantum technology research frontier into tomorrow's diagnostic devices)
 - **Petr Cígler, Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences**
 - **Goal:** Establish the required hardware and software tools, which are necessary to further push today's research frontier in colour centre based quantum sensing for MRS.

- **TheBlinQC** (Theory-Blind Quantum Control)
 - **Radim Filip, Palacký University Olomouc**
 - **Goal:** Develop and implement control techniques that do not require theoretical modelling, simulation or any knowledge of a systems' microscopic decomposition.

Počet financovaných projektů za zemi



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Proposed Timeline of the Call 2019

November 2018: Announcement of the Call

18 February 2019: Deadline for Short and Full Proposals

2 steps evaluation with one full proposals submission.

April 2019: 1st Evaluation Panel meeting

EP will preselect % of proposals for the second step.

June 2019: 2nd Evaluation Panel meeting (physical)

July 2019: Funding meeting of the QuantERA Consortium

July 2019: Publication of Call 2019 Results

Fall 2019: Projects start



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Thematic scope & Proposed budget

Thematic scope of proposals should include one or more of the following areas:

- Quantum communication
- Quantum simulation
- Quantum computation
- Quantum metrology sensing and imaging
- Quantum information sciences

More countries joined the QuantERA Call 2019

- **List of participating countries:** Austria, Belgium, Bulgaria, **Croatia**, Czech Republic, Denmark, France, Germany, Greece, Hungary, Israel, Italy, Latvia, **Lithuanina**, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom (**not in 2019 call: Finland, Ireland**)

Proposed budget: EUR 20 M (use savings from the Call 2017 (ca. 50 000 EUR) and add 100 000 EUR from the Reserve Fund)

- **Allocation of the MEYS (ČR): 500 000 EUR**

Eligibility criteria of the MEYS and Call documents

- More information is available on website: <http://www.msmt.cz/vyzkum-a-vyvoj-2/quantera-era-net-cofund-in-quantum-technologies-2-vyzva-s>



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Next steps & Events

- **Detailed information about Call 2019:**

- International documents of QuantERA

- Conditions of the MEYS

- <http://www.msmt.cz/vyzkum-a-vyvoj-2/quantera-era-net-cofund-in-quantum-technologies-2-vyzva-s>

- **Info & networking session:**

- December 5th, 2018 during the ICT 2018 Event in Vienna

- <https://quantera.eu/news/76-networking-session-for-the-quantera-call-2019>

- **Event „The Future of Quantum Technologies“:**

- December 11th, 2018 in Jerusalem

- <https://events.bizzabo.com/futureofquantumtech/home>



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Cheers to the Call 2019!





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Thank you for your attention!

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