

## Call to the Physics Education Research Community

In 2018 the European commission will launch the quantum technologies flagship project, supporting the development of quantum technology with a total of €1 billion. The goals of this project are to put Europe at the forefront of the second quantum revolution by supporting the development of quantum based information technology, with a focus on communication, simulators, sensors and computers, and to create a new generation of quantum technology professionals in Europe.

The key points of this quantum flagship have been collected in the [quantum manifesto](#) which will be the basis for the direction of the upcoming flagship project. Currently, the program is under consolidation and the community is asked to express their opinions and make suggestions to the process.

We see this flagship programme as a unique and grand opportunity to raise awareness of the key role of quantum physics in society and to stress the need for well-founded quantum physics education. To reach the ambitious goal of creating a new generation of researchers and engineers, actions in all forms of education are needed, starting even prior to the high school level. In order to support this new quantum technology education and to maximize the impact of the quantum flagship, these efforts should be coordinated and supported by education research actions.

On 10 November, the flagship's high level steering committee will meet with representatives from the community in Berlin to discuss feedback to the flagship structure. We plan to present the proposition below at this meeting to strengthen the role of research into quantum physics education. If this proposition receives positive reactions, further details will be elaborated. Our aim is to demonstrate that this proposition is a priority in the physics education research community. We therefore ask you to show your support by endorsing this proposition using the online form <https://goo.gl/forms/bSTQw8J5vuC3zouW2> until Monday 24 October by providing your name, position and the name of your institution.

With best regards

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## Proposition to the High Level Steering Committee

The endorsing parties of this proposition ask the High Level Steering Committee to consider the following points for the structure and direction of the quantum technologies flagship program:

1. Include a visible commitment to enhance quantum physics education and research into quantum physics education in order to support the development of a new generation of quantum technology professionals.
2. Exploit the momentum generated by the flagship program to engage young people throughout Europe in quantum science and quantum engineering, taking measures designed to respect the different structures and requirements of learning and teaching in the EU countries.
3. Support the communication between scientists, education researchers, educators, and stakeholders from politics and education industry.
4. Support measures to provide infrastructure to coordinate education efforts in order to maximize their impact.
5. Appoint a spokesperson for the duration of the programme for coordinating education and education research related actions.