Pozvánka na seminár Ústavu experimentálnej fyziky SAV, v. v. i.

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Aula ústavov SAV, Watsonova 47, Košice

„Development of a Slovak Quantum Communication Infrastructure for the Digital European Program“

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Anotácia:
The European Commission is working with all 27 EU Member States, and the European Space Agency, to design, develop and deploy the EuroQCI, which will be composed of a terrestrial segment relying on fibre communications networks linking strategic sites at national and cross-border level, and a space segment based on satellites. It will be an integral part of IRIS² (Infrastructure for Resilience, Interconnectivity and Security by Satellite), the new EU space-based secure communication system. The EuroQCI will safeguard sensitive data and critical infrastructures by integrating quantum-based systems into existing communication infrastructures, providing an additional security layer based on quantum physics. It will reinforce the protection of Europe's governmental institutions, their data centres, hospitals, energy grids, and more, becoming one of the main pillars of the EU's Cybersecurity Strategy for the coming decades.
The first implementation phase started in January 2023 with the support of the commission's Digital Europe Programme with a focus National projects allowing Member States to design and build the national quantum communication networks that will form the basis of the terrestrial segment, testing different technologies and protocols and adapting them to the specific needs of each country.
In this talk we will present both short and long terms visions for our national Slovak QCI infrastructure and put it in the context of the whole EuroQCI endeavour. We will also present the latest results obtained while building up our quantum testbed with the support of the underlying SANET infrastructure.