



Kick-off meeting of the Quantum Flagship "2D-SIPC" project

ICFO hosts the kick-off meeting of the Quantum Flagship "2D-SIPC" project, aimed at developing quantum devices that can be easily integrated in existing current silicon-based technologies.

November 23, 2018

The 2D-SIPC project from the Quantum Flagship has officially started with the Kick-off meeting taking place at ICFO on November 22nd. During the two-day event, partner introduced themselves to the rest of the consortium members and presented the different work packages that will be executed during the project's duration, putting into perspective the needs and solutions for the development and engineering of quantum networks, based on scalable on-chip integration of novel 2D materials into integrated photonic circuits (IPC).

Selected as one of the 20 projects that will kick-off the Quantum Flagship, an ambitious 10-year initiative supported by the European Commission for the next 10 years, 2D-SIPC has set a

ambitious goal of developing devices capable of creating, processing, storing, routing and detecting single photons. 2D-SIPC will span different research fields ranging from experimental and theoretical condensed matter physics, to photonics, as well as quantum optics and advanced photo-detection applications.

The three-year project will be coordinated by ICFO Prof. Dmitri Efetov, in collaboration with the University of Manchester, University of Cambridge, CNIT and Single Quantum. While ICFO focuses on single-photon detection and nano-imaging, Univ. of Manchester will focus on theory and fabrication processes of 2-D materials and stacking techniques for the heterostructures, Univ. of Cambridge on quantum optics and spectroscopy, CNIT on on-chip photonic circuits and Single Quantum on commercial single-photon detection, single-photon emission and packaging.