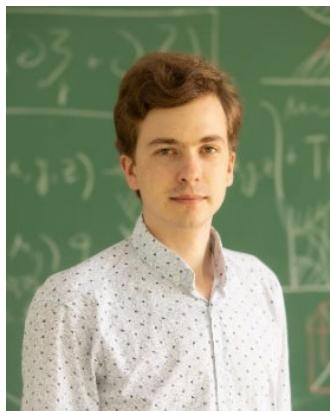


Monday, Jan 12, 2026 
14:00 h 
RUN Auditorium 



Dr. Kirill Voronin

Donostia International Physics Center, (DIPC)
San Sebastian, Spain

***Theory of near-field microscopy and
quantum optics of anisotropic materials***

The talk presents our recent theoretical advances in near-field microscopy and quantum optics of anisotropic media. First, I discuss an analytic theory of near-field microscopy, its extension to layered structures, and open theoretical challenges relevant for experiments. I then address quantum electrodynamics of strongly anisotropic materials, including quantization of hyperbolic phonon polaritons and emitter–polariton coupling, highlighting open questions and potential directions for future studies.

Host: Rupert Huber