

Towards superconducting correlations in the quantum Hall regime

Stefan HEUN - *NEST, Istituto Nanoscienze-CNR and Scuola Normale Superiore*

Helical 1D electronic systems are a promising route towards realizing topological quantum states that are protected from environmental perturbations and may exhibit non-Abelian statistics. Towards this goal we study quantum Hall states in high-mobility graphene hybridized with superconducting leads.