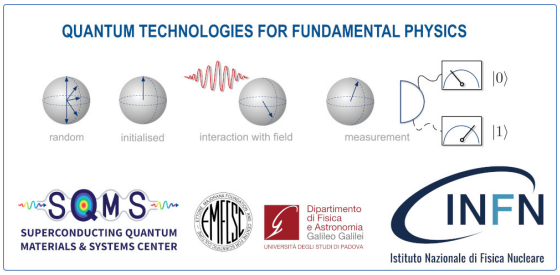

ID contributo: **38** Tipo: **non specificato**

A search for dark matter axions with a transmon-based single photon counter

domenica 3 settembre 2023 15:00 (15 minuti)

I will report about a haloscope experiment in which a hybrid surfaced (copper-NbTi) cavity immersed in a 2 T-magnetic field has been readout by a transmon-based single microwave photon detector (SMPD). The cavity frequency could be varied to probe for different axion masses around 30.5 microelectronvolt by means of a nanopositioner, and I will report about the upper limit that we obtained on the axion-photon coupling in a range of a few hundred kHz.

Relatore: BRAGGIO, Caterina (Istituto Nazionale di Fisica Nucleare)

Classifica Sessioni: Superconducting cavities, materials, and quantum technology for detection of weakly-coupled particles