

DMRadio-m³

DMRadio-m³ is a search for QCD axions down to DFSZ sensitivity between 30 and 200 MHz (120 –800 neV). The experiment uses a >4 T solenoidal magnet and a coaxial pickup to probe axions through their coupling to a magnetic field. The coaxial pickup is tuned to a given resonance frequency using either capacitive or inductive components. The signal is read out with dc SQUIDs that are housed in a low magnetic field region above the coaxial pickup. We present the current status of DMRadio-m³ including its design and projected sensitivity as well as specifics pertaining to the dedicated dc SQUID readout chain.

Author: ANKEL, Victoria (Stanford University)

Presenter: ANKEL, Victoria (Stanford University)