



Contribution ID: 105

Type: Oral presentation

Status of DMRadio 50L and m^3

Tuesday 19 July 2022 16:10 (20 minutes)

DMRadio is a series of experiments that searches for axions using the axion-photon coupling at frequencies lower than those which have been achieved with conventional cavity haloscopes. In this talk we present the status of two experiments of the DMRadio program: DMRadio 50L and DMRadio m^3 . DMRadio 50L uses a toroidal magnet and a high-Q LC-oscillator with target sensitivity to axions with $g_{a\gamma\gamma} < 5 \times 10^{-15} \text{GeV}^{-1}$ between 5 kHz and 5 MHz (20 peV to 20 neV). DMRadio m^3 consists of a higher frequency LC-oscillator in a solenoidal magnet with target sensitivity to QCD axions between 5 MHz and 200 MHz (20 neV to 0.8 μeV).

Author: RAPIDIS, Nicholas M. (Stanford University)

Presenter: RAPIDIS, Nicholas M. (Stanford University)

Session Classification: Parallel 2B - Axions