

DMRadio-50L

The QCD axion is one of the most well-motivated dark matter candidates as its discovery would also solve the long-standing strong-CP problem. DMRadio-50L aims to detect low-mass axion dark matter through its interaction with photons. Targeting axions in the 5 kHz to 5 MHz range, DMRadio-50L will employ a lumped-element LC resonator to enhance the axion signal. Presently undergoing commissioning, DMRadio-50L will not only access new axion parameter space but also serve as a platform for developing advanced quantum sensors for upcoming experiments in the DMRadio suite. This poster will highlight the present status and initial commissioning data of the experiment.

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