

Abstract Submitted
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Light Dark Matter Search using radio-frequency data mined from the Green Bank Telescope (GBT)¹ ADYANT KAMDAR, University of California, Berkeley — In this work, we present our ongoing effort aimed at the indirect detection of light dark matter, such as hidden photons or axions, by searching for a power excess in the radio-frequency spectra of astrophysical objects in the galaxies of the Local Group, including our own. In particular, we utilize large data sets of radio spectral data recorded by the Green Bank Telescope (GBT) to cover frequencies in the 1-12 GHz regime. This talk will primarily focus on a description of the recently released public data sets, the preliminary steps of data analysis, i.e. curation and selection of the data, calibration, normalization, etc., and a preview of the actual analysis to be carried out initially.

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