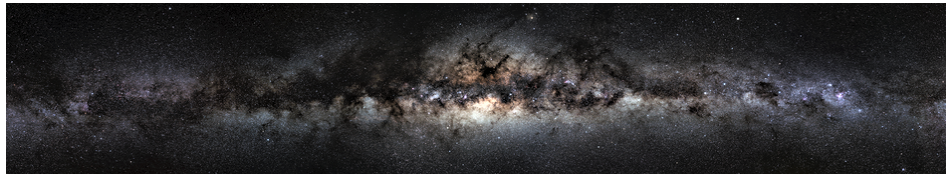


Dark Sectors of Astroparticle Physics (AstroDark-2021): Axions, Neutrinos, Black Holes and Gravitational Waves



Contribution ID: 86

Type: Oral

Ion Traps as Dark Matter Detectors

Thursday, 9 December 2021 11:38 (18 minutes)

Millicharge particles with charge just evading accelerator bounds, possess charge large enough to accumulate on earth and cause gigantic build-up over the age of the earth. I introduce a new idea that sets exquisite bounds on millicharge particle dark matter and promises to reach interesting parameter space in the near future. The new detection concept involves the remarkable sensitivity of standard model ions trapped in E&M fields which are being developed for quantum computing.

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Session Classification: Parallel 1: Axions and Other Dark Matter Particles