Abstract Submitted for the CUWIP22 Meeting of The American Physical Society

## Searching for Hidden Matter with milliQan<sup>1</sup> EMILY POTTEBAUM,

Iowa State University, MILLIQAN COLLABORATION — A growing number of searches for dark matter are looking for evidence of physics beyond the Standard Model. Of particular interest is the proposed milli-charged particle (mCP), which the milliQan experiment will search for during Run 3 of the LHC. The novel design of the milliQan detector is expected to substantially extend the mass-charge parameter space of mCPs, covering previously unexplored territory in experimental particle physics. This talk will discuss the development of a summing amplifier designed to significantly improve the milliQan detector's charge sensitivity.

<sup>1</sup>National Science Foundation

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Date submitted: 05 Jan 2022

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