

Abstract Submitted  
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**Matter Wave Interferometry with Strontium 87 Ions**<sup>1</sup> CHRISTOPHER ERICKSON, MARY LYON, JAMES ARCHIBALD, DALLIN DURFEE, Brigham Young University — We present progress on a strontium ion interferometer for use as an electromagnetic field sensor with unprecedented sensitivity. Applications include measurements of fringing fields, studies of image charge scattering in superconductors, and ultra-precise tests of electromagnetism.

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Christopher Erickson  
Brigham Young University

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