

Abstract Submitted
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Cold Strontium Ion Source for Ion Interferometry¹ JAROM JACKSON, DALLIN DURFEE, Brigham Young University — We are working on a cold source of Sr Ions to be used in an ion interferometer. The beam will be generated from a magneto-optical trap (MOT) of Sr atoms by optically ionizing atoms leaking out a carefully prepared hole in the MOT. A single laser cooling on the resonant transition (461nm) in Sr should be sufficient for trapping, as we've calculated that losses to the atom beam will outweigh losses to dark states. Another laser (405nm), together with light from the trapping laser, will drive a two photon transition in the atom beam to an autoionizing state.

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Jarom Jackson
Brigham Young Univ - Provo

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