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Matter-Wave Interferometry at BYU CHRISTOPHER ERICKSON, JAMES ARCHIBALD, DANIEL MERRILL, AARON BENNETT, DALLIN DURFEE, Brigham Young University — We report on the progress of two matter-wave interferometers at BYU. The first device is a thermal-beam Ramsey-Bordé calcium interferometer. The second device is an ion interferometer based on a laser-cooled $^{87}\text{Sr}^+$ beam which will be split and recombined using stimulated Raman transitions. Design considerations, instrumentation development, and possible applications of the devices will be discussed.

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