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Quantum Degenerate Gases of Strontium BRIAN DESALVO, Rice University, NATALI MARTINEZ DE ESCOBAR, PACAL MICKELSON, MI YAN, THOMAS KILLIAN — We have produced quantum degenerate gases of three of the four stable isotopes of strontium. Using two-stage laser trapping and cooling followed by direct evaporative cooling in a far-off- resonance optical dipole trap (ODT), a stable Bose-Einstein Condensate (BEC) of ^{84}Sr is formed. Via dual species trapping and sympathetic cooling in an ODT, an attractive BEC of ^{88}Sr is created, as well as a degenerate Fermi gas of ^{87}Sr. Differences in the evaporation scheme used to reach degeneracy for each isotope will be presented as well as the varied dynamics of the gases.

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