

Abstract Submitted
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Quantum degeneracy of mixed strontium gases MI YAN, BRIAN DESALVO, PASCAL MICKELSON, NATALI MARTINEZ DE ESCOBAR, THOMAS KILLIAN — We have attained quantum degeneracy in a mixture of ^{88}Sr (bosons) and ^{87}Sr (fermions). A Bose-Einstein condensate of ^{88}Sr , which has attractive interactions, is produced via sympathetic cooling using ^{87}Sr . Simultaneously, we have demonstrated Fermi degeneracy of ^{87}Sr by observing the difference in the sizes of the atom cloud, due to the Fermi pressure, between degenerate ^{87}Sr and ^{88}Sr .

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