

Abstract Submitted
for the DAMOP14 Meeting of
The American Physical Society

Quantum corrections to 3-body recombination in a dilute Bose-Einstein condensate¹ ERIC BRAATEN, HUDSON SMITH, Ohio State University — The rate at which the number density n of a dilute Bose-Einstein condensate decreases from 3-body recombination scales like $n^3 a^4$, where a is the scattering length. We calculate the corrections to the rate from quantum fluctuations in the condensate to second order in the diluteness variable $\sqrt{na^3}$. The second order term depends on Efimov's 3-body parameter.

¹This research was supported in part by the National Science Foundation under grant PHY-1310862

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Date submitted: 31 Jan 2014

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