

Abstract Submitted
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Many Body Energy Transfer in an Ultracold Rydberg Gas¹ NINA P. INMAN, Bryn Mawr College, BRIANA STRICKLAND, EVAN DRYFOOS, THOMAS J. CARROLL, Ursinus College, MICHAEL W. NOEL, Bryn Mawr College — In a resonant dipole-dipole interaction, Rydberg atoms exchange energy such that they transition to different states. We investigate the n -dependence of many-body dipole-dipole interactions. We present experimental and simulated results on the line shape of two, three, and four-body interactions.

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Nina P. Inman
Bryn Mawr College

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