

Abstract Submitted
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Saturation of three-body recombination fluorescence in ultracold neutral plasmas¹ SCOTT BERGESON, Brigham Young University, FRANCIS ROBICHEAUX, Auburn University — Three-body recombination (TBR) in ultracold neutral plasmas is a sensitive function the electron temperature. In strongly coupled plasmas, the traditional description of TBR should break down. We measurement fluorescence from recombination events and observe that the fluorescence rate begins to saturate as the low-temperature limit is approached. We also present evidence suggesting that the pathway to fluorescence from low-lying energy states may be different than what is traditionally thought.

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