

Abstract Submitted  
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**Excitations and behavior of a trapped two component Bose Einstein Condensate** CHRISTOPHER TICKNOR, RUSSELL BISSET, Los Alamos Natl Lab — We present an analysis of the excitation spectrum for a two-component quasi-two-dimensional Bose-Einstein condensate (BEC). We study how excitations change character across the miscible to immiscible phase transition. We find that the bulk excitations are typical of a single-component BEC with the addition of interface bending excitations. We further study the characteristic behavior of the gas across the miscible to immiscible phase transition.

Christopher Ticknor  
Los Alamos Natl Lab

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