

Abstract Submitted  
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**Quantum hydrodynamics of binary BECs<sup>1</sup>** PETER ENGELS, JIA-JIA CHANG, CHRIS HAMNER, Washington State University — We investigate the quantum hydrodynamics of a binary BEC. We introduce relative motion between the two components of a binary BEC and experimentally observe intriguing nonlinear dynamics including the formation of dark/bright solitons and inter-component quantum shocks. This talk will present our recent results and the current status of the experiment.

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