Abstract Submitted for the DAMOP10 Meeting of The American Physical Society

Nonlinear dynamics in the mixing and demixing of a two component BEC¹ JIAJIA CHANG, CHRIS HAMNER, PETER ENGELS, Washington State University — We experimentally study the dynamics resulting from the controlled mixing/demixing of ⁸⁷Rb Bose-Einstein condensates (BEC) in two different hyperfine states. Large and small scale domain formations are observed as well as the formation of nonlinear structures such as filled solitons. Recent and ongoing results will be presented.

¹We acknowledge funding from NSF and ARO.

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Date submitted: 26 Jan 2010 Electronic form version 1.4