## Abstract Submitted for the MAR17 Meeting of The American Physical Society

**Deformation of the quantum Hall systems in cold atoms**<sup>1</sup> KUAN-HAO CHEN, TIN-LUN HO, Ohio State University — We study the deformation of bosonic and fermionic quantum Hall states in cold atom systems through changes in their trapping potentials or in the curvature of the underlying spatial manifold. We show how the usual plasma analog can be generalized to study the density profile of these systems, including those with internal degrees of freedom.

<sup>1</sup>Work supported by NSF Grant DMR1309615, MURI Grant FP054294-D, and NASA Fundamental Physics Grant 1518233.

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Date submitted: 11 Nov 2016 Electronic form version 1.4