Deformation of the quantum Hall systems in cold atoms\textsuperscript{1} 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.

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