1063-53-176   **Michael Usher*** (`usher@math.uga.edu`), Department of Mathematics, University of Georgia, Athens, GA 30606. *Deformations in Hamiltonian Floer theory and in Morse theory.*

Certain deformations of the usual algebraic structure of Hamiltonian Floer theory will be discussed, leading among other applications to the construction of Calabi quasimorphisms on the universal covers of the Hamiltonian diffeomorphism groups of a wide class of symplectic manifolds, including all toric manifolds and all point blowups. I will also discuss a similar construction in finite-dimensional Morse theory, which surprisingly is so far understood less well than its Floer-theoretic counterpart. (Received August 15, 2010)