Weimin Chen* (wchen@math.umass.edu), Department of Mathematics and Statistics, University of Massachusetts -Amherst, Amherst, MA 01003. On the Floer homology of symplectic orbifolds.

This is an on-going project in which we will develop, in the orbifold context, a general framework for the various Floer homology theories, in particular, the Floer homology theory for the problem of periodic orbits in a symplectic orbifold. Special attention will be given to the case of the symmetric products of a symplectic manifold. Applications to orbifold string topology will also be considered. (Received January 06, 2009)