1054-57-42 **Joseph E Borzellino*** (jborzell@calpoly.edu), Department of Mathematics, California Polytechnic State University, 1 Grand Avenue, San Luis Obispo, CA 93407, and **Victor Brunsden** (vwb2@psu.edu), Department of Mathematics and Statistics, Penn State Altoona, 3000 Ivyside Park, Altoona, CA 16601. *Spaces of Smooth Orbifold Mappings.*

A well-known result in the theory of differentiable dynamical systems states that the set of smooth maps between a compact manifold M and a manifold N has the structure of a smooth infinite-dimensional manifold. By considering only diffeomorphisms, one sees that $\mathrm{Diff}(M)$ is an infinite-dimensional group with a local smooth manifold structure. In this talk, I will discuss generalizations of this result to the group of orbifold diffeomorphisms. Time permitting, I will discuss some recent work on analogous results for other classes of smooth orbifold maps. Part of the talk will review orbifolds and the mappings between them. (Received August 24, 2009)