1017-55-54Julia Weber* (jweber@mpim-bonn.mpg.de), Max-Planck Institut fuer Mathematik, Vivatsgasse7, 53111 Bonn, Germany. The universal functorial equivariant Lefschetz invariant.

The Lefschetz number, an integer associated to an endomorphism f of a topological space X, is an important classical invariant in algebraic topology. If L(f) is non-zero, the endomorphism has a fixed point. There are several generalizations of the Lefschetz number which give more precise fixed point information.

We are interested in the case where the space X has an action of a discrete group G and the endomorphism f is equivariant. We construct the universal functorial equivariant Lefschetz invariant using K_0 of a certain endomorphism category. We then derive results about fixed points of equivariant endomorphisms of cocompact proper smooth Gmanifolds. (Received February 08, 2006)