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Kate Ponto* (kponto1@nd.edu), Department of Mathematics, 255 Hurley Hall, Notre Dame, IN 46556. *Equivariant fixed point theory.*

The Lefschetz Fixed Point Theorem associates an integer, the Lefschetz number, to each endomorphism of a compact smooth manifold. The Lefschetz number is zero when the map has no fixed points. For a finite group G , several generalizations of the Lefschetz number and related invariants have been defined for equivariant endomorphisms of compact smooth G -manifolds. I will explain how these invariants are examples of duality and trace in bicategories and how this observation gives simple ways to compare different invariants. (Received August 25, 2008)