## 1030-37-118 **Todd Fisher\*** (tfisher@math.byu.edu), Department of Mathematics, 292 TMCB, Brigham Young University, Provo, UT 84602, and Jana Rodriguez Hertz. *Quasi-Anosov diffeomorphisms* of 3-manifolds.

In 1969, Hirsch posed the following problem: given a diffeomorphism of a manifold and a hyperbolic set for the diffeomorphism, describe the topology of the hyperbolic set and the dynamics of the diffeomorphism for this set. We solve the problem when the hyperbolic set is a closed 3-manifold. (Received July 26, 2007)