

1124-53-13

Nima Anvari* (anvarin@math.miami.edu), Coral Gables, FL 33146. *Equivariant rho-invariants and instanton homology of torus knots*. Preliminary report.

The equivariant rho-invariants are a version of the classical rho-invariants of Atiyah, Patodi, and Singer in the presence of an isometric involution. In this talk, we discuss these rho-invariants for all involutions on 3-dimensional lens spaces with 1-dimensional fixed point sets, as well as for some involutions on Brieskorn homology spheres. As an application, we compute the generators and Floer gradings in the singular instanton chain complex of (p, q) -torus knots with odd p and q . (Received June 06, 2016)