

1017-57-174

Joshua M Sabloff* (jsabloff@haverford.edu), 370 Lancaster Ave., Haverford, PA 19041.

Duality for Legendrian Contact Homology.

The contact homology algebra is a powerful invariant of Legendrian knots in contact manifolds. I will discuss a duality theorem for the contact homology of a Legendrian knot in the standard contact 3-space: off of a “fundamental class” in degree 1, the linearized Legendrian contact homology obeys a version of Poincaré duality between homology groups in degrees k and $-k$. Not only does the result itself simplify calculations, but its proof also establishes a framework for analyzing cohomology operations on the linearized Legendrian contact homology. (Received February 20, 2006)