

Duality exact sequences in contact homology

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I will discuss a “duality” among the linearized contact homology groups of a Legendrian submanifold in certain contact manifolds (in particular in Euclidean $(2n + 1)$ -space). This duality is expressed in a long exact sequence relating the linearized contact homology, linearized contact cohomology and the ordinary homology of the Legendrian submanifold. One can use this structure to ease difficult computations of linearized contact homology in high dimensions and further illuminate the proof of cases of the Arnold Conjecture for the double points of an exact Lagrangian in complex n -space.

1:10 p.m.
Math 520
Columbia University