

From Morse theory to Legendrian contact homology and back

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L01 Carson Hall, 4:00 pm
(Tea 3:30 pm Math Lounge)

Abstract

Legendrian contact homology is a part of Symplectic Field Theory introduced by Eliashberg, Givental, and Hofer. It is a framework for finding invariants of Legendrian submanifolds of contact manifolds by “counting” rigid (pseudo-)holomorphic disks. In the talk we describe Legendrian contact homology, some of its application, and recent results which relates it to Morse theory. The talk will be elementary and no previous knowledge of the subject is needed.