

**Meeting:** 999, Nashville, Tennessee, OZSVATH, Invited Address

999-57-5                    **Peter S. Ozsvath\***, Columbia University. *Holomorphic disks and low-dimensional topology.*

I will describe some invariants for low-dimensional manifolds constructed using holomorphic disks in certain associated almost-complex manifolds. These invariants—the Heegaard Floer homology group—can be used to construct invariants for knots, three-manifolds, smooth four-manifolds. I will focus on some applications of these invariants to questions in knot theory and its interplay with 4-manifold theory. This material is joint work with Zoltan Szabo. (Received January 23, 2004)