Conference on New Challenges and Perspectives in Symplectic Field Theory A conference in Honour of Yasha Eliashbergs 60th Birthday June 25 – 29, 2007

Knot Floer Homology

Peter S. Ozsvath

Department of Mathematics

Columbia University

New York, NY 10027

USA

petero@math.columbia.edu

Abstract

I will sketch the construction of knot Floer homology, and describe some recent advances which render the calculation of these invariants combinatorial and explicit. During the course of this talk, I outline joint work with collaborators Ciprian Manolescu, Sucharit Sarkar, Andras Stipsicz, Zoltan Szabo, and Dylan Thurston.