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New York, NY 10027. *Link Floer homology via bordered sutured Floer homology.*

Link Floer homology, HFL is a powerful invariant of links in 3-manifolds, and can be considered a special case of the more general sutured Floer homology SFH . The theory of bordered sutured Floer homology gives new ways of computing HFL , and investigating its properties. Given a link L in a 3-manifold Y , we can cut the link complement into pieces Y_1, \dots, Y_n . To these pieces we can associate bordered sutured invariants $BSD(Y_i)$, and use them to compute $HFL^-(Y, L)$ and $\widehat{HFL}(Y, L)$. This allows us to investigate how HFL behaves under small, local changes to the link. (Received March 30, 2010)