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Title: The link surgery formula and plumbed 3-manifolds

Abstract: Lattice homology is a combinatorial invariant of plumbed 3-manifolds due to Némethi. The definition is a formalization of Ozsváth and Szabó's computation of the Heegaard Floer homology of plumbed 3-manifolds. Némethi conjectured that lattice homology is isomorphic to Heegaard Floer homology. For a restricted class of plumbings, this isomorphism is known to hold, due to work of Ozsváth-Szabó, Némethi, and Ozsváth-Stipsicz-Szabó. By using the Manolescu-Ozsváth link surgery formula for Heegaard Floer homology, we prove the conjectured isomorphism in general. In this talk, we will talk about aspects of the proof, as well as some other perspectives in terms of bordered 3-manifolds with torus boundary.