

Higher dimensional Heegaard Floer homology and Hecke algebras

田垠 北京师范大学

Higher dimensional Heegaard Floer homology (HDHF) is a higher dimensional analogue of Heegaard Floer homology in dimension three. It's partly used to study contact topology in higher dimensions. In a special case, it's related to symplectic Khovanov homology. In this talk, we discuss HDHF of cotangent fibers of the cotangent bundle of an oriented surface and show that it is isomorphic to various Hecke algebras. This is a joint work with Ko Honda and Tianyu Yuan.

报告人简介：田垠，本科和硕士毕业于北京大学，博士毕业于美国南加州大学，现就职于北京师范大学。研究方向为低维拓扑、范畴化、辛几何。在 JEMS, Geom. Topol., Advances in Mathematics, Quantum Topology 等杂志发表过学术文章。