Colored knot Floer homology

Abstract: Inspired by colored Khovanov homology, for any knot *K* in the 3-sphere, we define *n*-colored knot Floer homology as the limit of the cobordism maps from the (full) link Floer homology of the (n, mn)-cable of K to the (full) link Floer homology of (n, (m + 1)n)-cable as *m* goes to infinity. Colored knot Floer homology is graded by Alexander multi-grading and Maslov grading and it is finite dimensional at each fixed degree. We discuss the module structure of this invariant and overview some examples. This is a joint work with Eugene Gorsky and Beibei Liu.