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Subhankar Dey* (sdey4@ua.edu) and **Fraser Binns**. *Rank Bound in Link Floer Homology and Detection Results*. Preliminary report.

We use Heegaard Floer invariant of Legendrian links to obtain lower bounds on the rank of certain Alexander gradings in the knot Floer homology of links, which generalizes existing results for knots. We use these to classify links with knot Floer homology of small rank. In another direction we use a variant of Ozváth-Szabó classification of E_2 collapsed $\mathbb{Z} \oplus \mathbb{Z}$ filtered chain complexes to show that the knot Floer homology detects $T(2, 8)$ and $T(2, 10)$, and that link Floer homology detects $(2, 2n)$ cables of trefoil and figure eight knot. (Received September 18, 2021)