

Joint w/ Lev Rozansky.

Thm [O-R] For every $b \in \mathbb{B}r_n$

$$\mathcal{F}_b \in \text{Coh}(\dots)$$

s.t. $H^*(\mathcal{F}_b)$ is an isotopy inv. of $\text{Tr}(L)$.

HOMFLY-PT poly:

$$a P(\overrightarrow{\nearrow}) - a^{-1} P(\overrightarrow{\searrow}) = (a + a^{-1}) P(\nearrow) P(\searrow)$$

$$P(\bigcirc) = 1$$

Categorified by Khovanov-Rozansky.

$$H^{i,j,k} \text{ s.t. } \sum H^{i,j,k} a^i q^j (-1)^k = P$$

..... We compute for torus knots.....