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*Knot Floer homology and Symmetric knots.*

A knot is called symmetric if there is an orientation preserving diffeomorphism of  $S^3$  which fixes the the knot. In particular, there are two such type of symmetry when the diffeomorphism is an involution, one is a strong involution which switches the orientation of the knot and the other is a periodic involution which is orientation preserving on the knot. In this talk we will discuss how these involutions induce involutions on the knot Floer homology, and how we compute them. Moreover surgery on such symmetric knots induce a symmetry on the surgered manifold. We will also discuss a relation between knot Floer involution of a symmetric knot with the Heegaard Floer involution of the 3-manifolds obtained by doing surgery on it. (Received January 18, 2021)