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Lucas Culler* (lculler@math.princeton.edu), 11 Bank St, Princeton, NJ 08542. *Knot Floer Homology and the Tate Curve.*

I will explain how the knot Floer complex of a knot K in S^3 can be interpreted as an object in the derived category of coherent sheaves on the Tate curve. Under this interpretation, the surgery formula of Ozsvath and Szabo becomes a computation of sheaf cohomology. If K admits an L-space surgery then the associated object is an ideal sheaf, which I will describe explicitly. (Received January 20, 2015)