Adam C Knapp* (knappa@math.msu.edu), A528 Wells Hall, Department of Mathematics, Michigan State University, East Lansing, MI 48824. Computations of Floer Homology for certain Lagrangian Tori in closed 4-manifolds.

We compute the Lagrangian Floer cohomology groups of certain tori in closed simply connected symplectic 4-manifolds arising from Fintushel-Stern knot surgery. These manifolds are usually not symplectically aspherical. As a result of the computation we observe examples where $HF(L_0) \cong HF(L_1)$ and $L_0$ and $L_1$ are smoothly isotopic but $L_0, L_1$ are not symplectically isotopic and are distinguished by $HF(L_0, L_1)$. (Received September 26, 2006)