1048-57-86 **Matthew E Hedden*** (mhedden@math.mit.edu), 77 Massachusetts Avenue, Math Department, Building 2, Room 230, Cambridge, MA 02139. *Knot theory and algebraic curves in subcritical Stein domains.* Preliminary report.

Generalizing the work of Rudolph and Boileau-Orevkov, I'll characterize those knots in the connected sum of $S^1 \times S^2$ which arise as the boundary of a properly embedded algebraic curve in the Stein filling of this manifold. The characterization is given by quasipositivity in the braid group of a punctured sphere.

Time almost certainly not permitting, I will discuss how this is connected to knot Floer homology. (Received January 26, 2009)