1037-54-349   **Adam Lowrance*** (`lowrance@math.lsu.edu`), Department of Mathematics, Louisiana State University, Baton Rouge, LA 70803-4918. *Knot Floer width and Turaev genus.*

Knot Floer width is a knot invariant derived from the knot Floer homology $\widehat{HFK}(K)$ of a knot K in S^3. The support of the bigraded group $\widehat{HFK}(K)$ lies on a finite number slope one lines with respect to the bigrading. Knot Floer width is a measurement of the farthest distance between two such lines of support. Turaev genus is a measurement of the minimum genus of a cannonical ribbon graph associated to a knot diagram where the minimum is taken over all diagrams. We show that Turaev genus gives a natural bound for knot Floer width. (Received February 05, 2008)