1043-81-213   **Ben Webster***, MIT. *Categories coming from symplectic singularities, or on the Ext-algebra of hot fudge.*

I'll discuss some categories coming from the geometry of symplectic varieties. These categories have interesting ties to the geometry of the varieties, and also have some interesting algebraic properties (some are Koszul, highest weight, etc.). Interesting examples include categories O for simple Lie algebras and for rational Cherednik algebras, Zheng's categorifications of tensor products of representations of Kac-Moody algebras, and categories defined by Braden, Licata, Proudfoot and myself. Hopefully, this perspective can help provide a unified perspective on all these categories. (Received September 04, 2008)