Symplectic Geometry Seminar

Monday, April 28, 4pm
Room 383N

VIVEK SHENDE
UC Berkeley

Legendrians, Augmentations, and Sheaves

Abstract
To a legendrian at contact infinity in the cotangent bundle of a manifold, we associate
the category of sheaves on the manifold with singular support in the legendrian. This
category is a legendrian isotopy invariant. In the case of legendrian knots in \(R^3\), it is
equivalent to a category of representations of the Chekanov-Eliashberg algebra. The
category structure is not exactly the Bourgeois-Chantraine composition, but instead is
related to it as cohomology is related to compactly supported cohomology. I may also
discuss relations to Khovanov-Rozansky knot homology.

http://math.stanford.edu/~ionel/sgs.html