

# Symplectic Geometry Seminar

Monday, April 28, 4pm

Room 383N

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## 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.