"Objects in the mirror may appear closer than they really are." — Not General Motors

## The Trivial Notions Seminar Proudly Announces

## Homological Mirror Symmetry for the Elliptic Curve

## A talk by Aleksandar Subotic

## Abstract

Let X be a complex projective variety. Much of the algebraic geometry of X is incorporated into the bounded derived category of coherent sheaves D(X), a category that contains the category of sheaves. Homological mirror symmetry is the claim that for many X the category D(X) can be described in terms of the symplectic geometry of a "mirror" symplectic manifold  $\hat{X}$ . In this talk we'll describe how the correspondence works in the simplest case of an elliptic curve, and what the complications are in the general case.

Thursday, April  $30^{th}$  at 2:07 pm Science Center 507