

# **abstract**

CATEGORIES AND KNOT INVARIANTS

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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Due to the pioneering work of Khovanov, there has been a lot of recent interest in certain knot homology theories. I will explain a program to construct these knot homology theories using braid group actions on derived categories of coherent sheaves. In particular, I will consider derived categories of coherent sheaves on certain moduli spaces of vector bundles on curves. I will explain connections with spherical twists, Mukai flops, and Chuang-Rouquier's  $sl_2$  categorification.