Elliptic character sheaves

David Nadler
University of California, Berkeley

I will discuss joint work with David Ben-Zvi (and in parts with Toly Preygel and David Helm) on character sheaves for loop groups. Our story will have two mirror sides: one about geometric Eisenstein series on principal bundles on elliptic curves, and the other about coherent sheaves on the commuting variety of local systems on elliptic curves. We will focus on the elliptic Springer sheaf and its mirror counterpart to illustrate the microlocal geometry and representation theory involved.