

# Stanford Algebraic Geometry — Seminar —

## LANGLANDS DUALITY AND REAL GROUPS

DAVID BEN-ZVI

Texas

### Abstract

I will describe joint work with David Nadler (Northwestern U) that seeks to “embed” the representation theory of real Lie groups in the geometric Langlands program, that is, into the geometry of sheaves on moduli spaces of bundles on algebraic curves. I will introduce the geometric Langlands program as a geometric Fourier theory for these moduli spaces, and explain how in the case of  $\mathbb{P}^1$  the representation theory of complex groups (provably) and real groups (conjecturally) emerges.

Friday, November 18

3:15 p.m.

Room 383-N

<http://math.stanford.edu/~vakil/s0506/>