

RELATIVE DOLBEAULT GEOMETRIC LANGLANDS VIA THE REGULAR QUOTIENTS

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Time: Tuesday, December 24, 2024, 10:30-11:30

Venue: Room 102, Shanghai Center for Mathematical Sciences

Abstract:

For an affine smooth homogeneous spherical variety with abelian regular centralizer and no type N root, we are going to formulate a relative geometric Langlands conjecture in the Dolbeault setting. More concretely, we conjecture a Fourier-Mukai duality between

the Dolbeault period sheaf and a sheaf whose construction closely resembles the Dirac-Higgs bundle of a polarization of the dual symplectic representation of D. Ben-Zvi, Y. Sakellaridis, and A. Venkatesh. We verify our conjecture in several cases. This is based on my joint work with T. Hameister and B. Morrissey.