Mathematics and CS Seminar

Relative Langlands duality of singular automorphic periods

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Host: Tamas Hausel

Relative Langlands duality, as recently introduced by Ben-Zvi--Sakellaridis--Venkatesh, posits that well known formulae in the theory of automorphic periods can be understood as a duality of Hamiltonian actions by Langlands dual groups. In the expository half of the talk, I will introduce relative duality and its relation with fundamental concepts in the Langlands program: automorphic periods, L-functions, and functoriality. In the second half, I will discuss joint work with Akshay Venkatesh in which we follow this philosophy to understand the duality underlying integral representations of L-functions discovered by Garrett and Ginzburg more than 30 years ago. In doing so, we describe a new numerical invariant of L-parameters, generalising Langlands' notion of L-functions.

Thursday, March 14, 2024 01:00pm - 03:00pm
Office Bldg West / Ground floor / Heinzel Seminar Room (I21.EG.101)

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