Seminar/Talk

Characters and Langlands parameters of smooth representations of p-adic groups

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The local Langlands correspondence predicts a parametrization of the smooth dual of a reductive p-adic group in terms of certain geometric data defined from the complex Langlands dual group. This is now a theorem in many cases, but in general, a direct bridge between the two sides is still missing. On the other hand, the character of an irreducible representation determines in principle everything about the representation, so one may naturally ask how the character relates to the Langlands parameter. This is the main theme of the talk. I plan to:- give an overview of some of the main elements of the Langlands parametrization, with examples;- explain the main tools that we have in the study of characters (namely, the local character expansion due to Howe and Harish-Chandra);- present evidence of the relation between the local character expansion and the geometry of the Langlands parameters. The talk will mainly be of expository nature, but any new results that I will present are joint with Julee Kim, Lucas Mason-Brown, and Emile Okada.

Thursday, April 17, 2025 01:00pm - 03:00pm

Office Bldg West / Ground floor / Heinzel Seminar Room (I21.EG.101)

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