



Seminar/Talk

Bessel equations, hypergeometric sums and geometric Langlands correspondence

Daxin Xu

Morningside Center of Mathematics

Host: Tamas Hausel

I will first review the relationship between the Kloosterman sums and the classical Bessel differential equation. Recently, there are two generalizations of this story (corresponding to GL₂-case) for arbitrary reductive groups using ideas from the geometric Langlands program, due to Frenkel-Gross and Heinloth-Ngô-Yun. I will discuss my joint work with Xinwen Zhu where we unify previous two constructions from the p-adic aspect and identify the exponential sums associated to different groups as conjectured by Heinloth-Ngô-Yun. I will also talk about my recent joint work with Masoud Kamgarpour and Lingfei Yi on the generalization of the above story to hypergeometric sheaves.

Thursday, April 28, 2022 01:00pm - 03:00pm

<https://mathseminars.org/seminar/AGNTISTA>



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station. Please find a schedule of the ISTA Shuttle on our webpage: <https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.