

Online Number Theory Seminar

13 February 2026. – 17:00-17:50

P. Maga: The sup-norm problem of automorphic forms: spherical and non-spherical.

The sup-norm problem plays a central role in the analytic theory of automorphic forms. Broadly speaking, it asks for bounds on Laplace eigenfunctions on arithmetic quotients of a symmetric space. Such functions arise from spherical representations of the underlying Lie group, i.e., those having a vector fixed by a maximal compact subgroup. Quite recently, a new direction of research has opened up concerning non-spherical representations. In this talk, I will discuss these new aspects of the problem and present recent results regarding the non-spherical case.