Séminaire N. Bourbaki

SAMEDI 26 JUIN 2021

14h00 Philippe MICHEL
Recent progresses on the subconvexity problem

The subconvexity problem aims at providing non-trivial (ie. subconvex) bounds for central values of automorphic L-functions; the main conjecture in this area is the Generalized Lindeloef Hypothesis which itself is a consequence of the Generalised Riemann Hypothesis. This lecture will survey several advances that have been made on this question during the past ten years : these include, the delta-symbol approach of R. Munshi, the Weyl type bounds of I. Petrow and M. Young (both use the Dirichlet L-series representation of the central values) and the works of P. Nelson and A. Venkatesh (which use the automorphic period representations for the central value).