BOSTON UNIVERSITY NUMBER THEORY SEMINAR

Λ-adic Waldspurger Packets

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Monday, Mar 21 at 4:15 pm
111 Cummington Street, MCS B21
Tea and cookies in MCS 144 at 4:00 pm

Abstract: Waldspurger has shown that the genuine automorphic cuspidal representations of the metaplectic cover S of SL_2 are divided naturally into packets, and that these packets are indexed by the cuspidal automorphic representations of PGL_2. We construct packets of Λ-adic modular forms of half integral weight, indexed by Λ-adic forms on PGL_2. The elements of the Λ-adic packets are nonzero, but they have specializations that vanish, owing to a trivial zero phenomenon and the sign of a complex root number. This is in contrast to the usual trivial zero phenomenon which arises from the vanishing of a p-adic factor.