

BOSTON UNIVERSITY NUMBER THEORY SEMINAR

Hecke-Shintani representations

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Monday, February 12 at 4:15 pm
111 Cummington Mall, MCS B21
Tea and cookies in MCS 144 at 4:00 pm

Abstract: The aim of this talk is to point out a connection between two seemingly unrelated achievements: Anderson's paper (*Duke Math. J.* 114, 2002) extending the Kronecker-Weber theorem to the case of "almost abelian" extensions of \mathbb{Q} and Shintani's paper (*J. Math. Soc. Japan* 30, 1978) proving certain cases of Stark's conjecture using an observation that goes back to Hecke (*Math. Annalen* 97, 1926). The connection is that every irreducible almost abelian Artin representation of \mathbb{Q} occurs in a tensor product of "Hecke-Shintani representations." The latter representations also have amusing characterizations in terms of Rankin-Selberg convolutions and in terms of lacunarity of Fourier coefficients.