BOSTON UNIVERSITY NUMBER THEORY SEMINAR

Periods of modular forms and identities between Eisenstein series

Kamal Khuri-Makdisi (American Univ. of Beirut)

Monday, Mar. 3 at 4:15 pm 111 Cummington Street, MCS B21 Tea and cookies in MCS 144 at 4:00 pm

Abstract: Borisov and Gunnells observed in 2001 that certain linear relations between products of two holomorphic weight 1 Eisenstein series had the same structure as the relations between periods of modular forms; a similar phenomenon exists in higher weights. We give a conceptual reason for this observation in arbitrary weight. This involves an unconventional way of expanding the Rankin-Selberg convolution of a cusp form with an Eisenstein series. This is joint work with Wissam Raji.