BOSTON UNIVERSITY NUMBER THEORY SEMINAR

Overconvergent modular forms and the p-adic Jacquet-Langlands correspondence

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Monday, April 3 at 4:15 pm
111 Cummington Mall, MCS B21
Tea and cookies in MCS 144 at 4:00 pm

Abstract: We describe an explicit transfer of Hecke eigensystems from overconvergent modular forms to quaternionic modular forms, answering an old question of Serre and connecting with recent work of Knight and Scholze. The transfer depends on a construction of overconvergent modular forms using the infinite level modular curve; we sketch this construction and explain how certain features of the p-adic theory of modular forms (e.g., p-adic weights) arise naturally from the equivariant geometry of the projective line.