NUMBER THEORY SEMINAR Monday, Jan 26, 4.30 - 5.30 pm, MS 6221

Speaker: Don Blasius

TITLE: Zeta functions of quaternionic Shimura varieties

ABSTRACT: We compute, at all places, the Hasse-Weil zeta functions of the quaternionic Shimura varieties. This extends Carayol's work, which concerns case of curves, and gives the first examples of higher dimensional Shimura varieties for which the zeta functions are computed at all places. The methods are global and do not require new (e.g beyond the cases of Carayol) difficult direct zeta computations at places of bad reduction. Indeed, the result is in the spirit of the classical deduction of the local classfield theory correspondance from the global one.