

SPEAKER: Ben Howard

TITLE: An intersection problem on unitary Shimura varieties

ABSTRACT: A Shimura variety of type $U(n - 1, 1)$ has two type of special cycles. One type of special cycle is the locus of points with complex multiplication by a fixed CM field, and another is the family of Kudla-Rapoport divisors. I will describe an ongoing project to compute the arithmetic intersection multiplicities of these cycles, and to relate these intersection multiplicities to Fourier coefficients of Eisenstein series.