SPEAKER: Dermot McCarthy (Texas Tech University)

TITLE: Multiplicative relations for Fourier coefficients of degree 2 Siegel eigenforms

ABSTRACT: It is well known that the space of elliptic modular forms, of a given weight, has a basis of Hecke eigenforms which have multiplicative Fourier coefficients. While Hecke theory has been extended to Siegel modular forms, the results are not as straightforward as the elliptic case. In this talk, we will first outline the work of Andrianov on how the Hecke theory generalizes to spaces of degree 2 Siegel modular forms. Then we will discuss recent work on deriving simple multiplicative relations, which are analogous to the elliptic case, between certain Fourier coefficients of degree 2 Siegel eigenforms.