

SPEAKER: Sheng-Chi Liu (Texas A&M University)

TITLE: Growth and nonvanishing of restricted Siegel modular forms arising as Saito-Kurokawa lifts

ABSTRACT: A Siegel modular form, when restricted to a certain natural submanifold of Siegel's upper half space, is essentially a classical elliptic modular form in each of two variables. In the special case that the Siegel form is a Saito-Kurokawa lift, Ichino gave a formula which explicitly decomposes this restricted Siegel form into elliptic modular forms; the formula involves central values of Rankin-Selberg  $L$ -functions on  $GL(3) \times GL(2)$ . I will talk about some recent results on the average behavior of these  $L$ -functions which give some information on how the restricted Siegel form usually behaves. This is joint work with Matt Young.