Boston University Number Theory Seminar

Towards a new Shimura lift

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Monday, November 13 at 4:00 pm  
665 Commonwealth Avenue, CDS 548  
Tea and cookies at 3:30

Abstract: The classical Shimura correspondence lifts automorphic representations on the double cover of $SL_2$, corresponding to classical half-integral weight forms, to automorphic representations on $PGL_2$. Though efforts have been made for many years to generalize this map to higher rank groups and higher degree covers, our knowledge is limited. In this talk I present joint work with Omer Offen that points to a new Shimura lift for automorphic representations on the triple cover of $SL_3$. We establish the Fundamental Lemma for a relative trace formula. Moreover, this project will characterize the image of the lift by means of a period involving a theta function on $SO_8$, confirming a 2001 conjecture of Bump, Friedberg and Ginzburg.