

*Department of Mathematics,
University of California, San Diego*

Math 209 - Number Theory Seminar

Dr. Shuichiro Takeda

Ben Gurion University
Israel

On the regularized Siegel-Weil formula for the second terms and non-vanishing of theta lifts from orthogonal groups

Abstract:

In this talk, we will discuss (a certain form of) the Siegel-Weil formula for the second terms (the weak second term identity). As an application, we show the following non-vanishing result of global theta lifts from orthogonal groups: Let π be a cuspidal automorphic representation of an orthogonal group $O(V)$ with $\dim V = 2r - j$ even and $0 \leq j \leq r - 1$. Then the global theta lift of π to $Sp(2r)$ does not vanish "up to disconnectedness" if the (incomplete) L -function $L^S(s, \pi)$ does not vanish at $s = 1 + \frac{j}{2}$. (This is a joint with W. Gan.)

Host: Wee Teck Gan

Thursday, April 3, 2008

2:00 PM

AP&M 7421
