

Meeting: 1004, Bowling Green, Kentucky, SS 9A, Special Session on L-Functions

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Liftings from $\widetilde{SL}(2)$ to $Spin(1,4)$.

I will talk about lifting of cuspidal automorphic forms from \widetilde{SL}_2 to $Spin(1,4)$. The main tool is the converse theorem due to Maaß which roughly states that a function on $Spin(1,4)$ is automorphic if and only if a certain family of associated L-functions have "nice" properties . We expect that the automorphic forms so obtained give CAP representations for $Spin(1,4)$. The main motivation is the work of Ikeda in which he constructs CAP representations for $Sp(2n)$ by lifting automorphic forms from \widetilde{SL}_2 to $Sp(2n)$. ($n = 1$ is the special case of Saito-Kurokawa lift) This work is part of my PhD thesis with Professor Steve Rallis.

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