Lie Group and Representation Theory Seminar

Date: December 20 (Tue), 2005, 16:30–17:30
Place: RIMS, Kyoto University : Room 402
Speaker: Joachim Hilgert (Paderborn)
Title: Hecke Operators on Spaces of Period Functions

Abstract:

Period functions are the analog of period polynomials, wellknown in the theory of modular forms, for Maass cusp forms. Before they were considered in the context of Maass forms they came up in physicists work on the transfer operator of geodesic flows on hyperbolic surfaces. The structure of these operators suggested the existence of Hecke type operators on spaces of period functions. It turns out that the constructions given in the context of transfer operators can be related to the standard Hecke operators on Maass forms in a precise way.