



## Minisymposium 17 - Globale Analysis

## Harmonic analysis on locally symmetric spaces and number theory

WERNER MÜLLER, UNIVERSITÄT BONN, MATHEMATISCHES INSTITUT

The modern theory of automorphic forms povides a deep connection between number theory and the spectral decomposition of the algebra of invariant differential operators on quotients of symmetric spaces by arithmetic groups. On the other hand, hyperbolic surfaces defined by arithmetic groups and their higherdimensional generalizations provide models for important questions in quantum chaos. The purpose of the talk is to review recent developments in this area and outline some of the fundamental problems.