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Abstracts of Plenary and Invited Lectures

Section:

7. Lie Groups and Lie Algebras

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Harmonic analysis on semisimple p-adic Lie algebras

Certain topics in harmonic analysis on semisimple groups arise naturally when one uses the Arthur-Selberg trace formula to study automorphic representations of adele groups. These topics, which fall under the heading of "comparison of orbital integrals, " have been surveyed in Waldspurger's article in the proceedings of ICM94. As in Harish-Chandra's work, many questions in harmonic analysis on the group can be reduced to analogous questions on its Lie algebra, and in particular this is the case for "comparison of orbital integrals. " We will discuss some recent work of this type.