Section 7

Lie Groups and Lie Algebras

In case of several authors, Invited Speakers are marked with a *.

James Arthur: Towards a Stable Trace Formula ..... II 507

Joseph Bernstein: Analytic Structures on Representation Spaces of Reductive Groups ..... II 519

Ivan Cherednik: From Double Hecke Algebra to Analysis ..... II 527

Alex Eskin: Counting Problems and Semisimple Groups ..... II 539

Robert E. Kottwitz: Harmonic Analysis on Semisimple p-Adic Lie Algebras ..... II 553

L. Lafforgue: Chtoucas de Drinfeld et Applications ..... II 563

Shahar Mozes: Products of Trees, Lattices and Simple Groups ..... II 571

Vera Serganova: Characters of Irreducible Representations of Simple Lie Superalgebras ..... II 583

Kari Vilonen: Topological Methods in Representation Theory ..... II 595

Minoru Wakimoto: Representation Theory of Affine Superalgebras at the Critical Level ..... II 605