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REPRESENTATION THEORY AND HARMONIC ANALYSIS ON SEMISIMPLE LIE GROUPS

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Contents

Preface

The five papers which appear in this volume were all written more than fifteen years ago. For various reasons, they have never appeared in print. The papers include the theses of J. Arthur, M. S. Osborne, and W. Schmid; the fundamental paper of R. P. Langlands on the classification of irreducible admissible representations of real reductive Lie groups; and an expository paper by P. Trombi on the work of Harish-Chandra on harmonic analysis on real semisimple Lie groups, in particular, the theory of the Eisenstein integral. Three of these works (Arthur, Osborne, Trombi) have received limited circulation through the *Lecture Notes in Representation Theory* published by the Mathematics Department of the University of Chicago. Langlands' paper and Schmid's thesis were distributed as preprints by the authors. However, because of the basic nature of the material contained therein, the Editors have concluded that these papers deserve much broader exposure.

In a real sense, one could say that most of this material has either appeared elsewhere or has been subsumed in later publications. Nonetheless, these later publications cannot replace the vitality and viewpoint of the original manuscripts. We also include a brief introduction to each paper and a synopsis of the major developments which have occurred in the area covered by each paper. The debt owed by the authors to Harish-Chandra and his work is obvious from the contents of their papers. The debt owed by the Editors is equally real. This volume is dedicated to Harish-Chandra, and the royalties will be donated to the Visiting Members Fund at the Institute for Advanced Study.

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