

ISSN 1881-6193

**RIMS Kôkyûroku Bessatsu B7**

**Representation Theory and Analysis  
on Homogeneous Spaces**

**April, 2008**

**Research Institute for Mathematical Sciences  
Kyoto University**

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Printed in Japan.

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## Preface

The RIMS workshop “Representation Theory and Analysis on Homogeneous Spaces” was held from August 21 (Monday) through August 24 (Thursday) 2006.

This volume is a collection of peer reviewed papers based on the talks delivered at the RIMS workshop. The topics include newly born areas such as discontinuous groups for non-Riemannian homogeneous spaces, geometric approach to minimal representations, visible actions on complex manifolds and multiplicity-free representations, together with the traditional areas such as automorphic forms and the duality theorem of unitary representations. The diversity of the theory of group actions and representations in this volume ranges from infinite dimensional representations of Lie groups to algebraic geometry, number theory and rigidity theorems in geometry.

We would like to thank all the participants, and in particular, the invited speakers and anonymous referees. Our special thanks go to the staffs of RIMS for their kind and efficient support for the conference and its proceedings.

March 2008

Hideko Sekiguchi  
(the University of Tokyo)