

Representation Theory of Semisimple Groups

PRINCETON LANDMARKS
IN MATHEMATICS AND PHYSICS

Non-standard Analysis, *by Abraham Robinson*

General Theory of Relativity, *by P.A.M. Dirac*

Angular Momentum in Quantum Mechanics, *by A. R. Edmonds*

Mathematical Foundations of Quantum Mechanics,
by John von Neumann

Introduction to Mathematical Logic, *by Alonzo Church*

Convex Analysis, *by R. Tyrrell Rockafellar*

Riemannian Geometry, *by Luther Pfahler Eisenhart*

The Classical Groups: Their Invariants and Representations,
by Hermann Weyl

Topology from the Differentiable Viewpoint, *by John W. Milnor*

Algebraic Theory of Numbers, *by Hermann Weyl*

Continuous Geometry, *by John von Neumann*

Linear Programming and Extensions, *by George B. Dantzig*

Operator Techniques in Atomic Spectroscopy, *by Brian R. Judd*

The Topology of Fibre Bundles, *by Norman Steenrod*

Mathematical Methods of Statistics, *by Harald Cramér*

Theory of Lie Groups, *by Claude Chevalley*

Homological Algebra, *by Henri Cartan and Samuel Eilenberg*

PCT, Spin and Statistics, and Ali That
by Raymond F. Streater and Arthur S. Wightman

Stable and Random Motions in Dynamical Systems: With Special
Emphasis on Celestial Mechanics, *by Jürgen Moser*

Representation Theory of Semisimple Groups: An Overview Based on Examples,
by Anthony W. Knapp

Representation Theory of Semisimple Groups

AN OVERVIEW BASED ON EXAMPLES

With a new preface by the author

ANTHONY W. KNAPP

PRINCETON UNIVERSITY PRESS
PRINCETON AND OXFORD

Copyright © 1986 by Princeton University Press
Published by Princeton University Press, 41 William Street,
Princeton, New Jersey 08540

In the United Kingdom: Princeton University Press, 3 Market Place,
Woodstock, Oxfordshire OX20 1SY

All Rights Reserved

Originally published as part of the Princeton Mathematical Series, No. 36

Third printing, and first Princeton Landmarks in Mathematics edition,
with a new preface by the author, 2001

Library of Congress Cataloging-in-Publication Data

Knapp, Anthony W.

Representation theory of semisimple groups, an overview based on examples / with a
new preface by the author Anthony W. Knapp.

p. cm. — (Princeton landmarks in mathematics)

Originally published: 1986.

Includes bibliographical references and index.

ISBN 0-691-09089-0 (pbk. : alk. paper)

1. Semisimple Lie groups. 2. Representations of groups. I. Series.

QA387 .K58 2001

512'.55—dc21 2001027843

British Library Cataloging-in-Publication Data is available

This book has been composed in Lasercomp Times Roman

Printed on acid-free paper. ∞

www.pup.princeton.edu

Printed in the United States of America

P

*To Susan
and
Sarah and William
for their patience*

