

A. N. Parshin I. R. Shafarevich (Eds.)

Algebraic Geometry IV

Linear Algebraic Groups
Invariant Theory



Springer-Verlag Berlin Heidelberg GmbH

Consulting Editors of the Series:
A. A. Agrachev, A. A. Gonchar, E. F. Mishchenko,
N. M. Ostianu, V. P. Sakharova, A. B. Zhishchenko

Title of the Russian edition:
Itogi nauki i tekhniki, Sovremennye problemy matematiki,
Fundamental'nye napravleniya, Vol. 55, Algebraicheskaya geometriya 4
Publisher VINITI, Moscow 1989

Mathematics Subject Classification (1991):
20Cxx, 11E57, 20Gxx

ISBN 978-3-642-08119-4

Library of Congress Cataloging-in-Publication Data
Algebraicheskaia geometriia 4. English
Algebraic geometry IV: linear algebraic groups, invariant theory / A. N. Parshin, I. R. Shafarevich (eds.).
p. cm. — (Encyclopaedia of mathematical sciences; v. 55)
Includes bibliographical references and index.
ISBN 978-3-642-08119-4 ISBN 978-3-662-03073-8 (eBook)
DOI 10.1007/978-3-662-03073-8
I. Linear algebraic groups. 2. Invariants. I. Parshin, A. N.
II. Shafarevich, I. R. (Igor' Rostislavovich), 1923 -
III. Title. IV. Title: Algebraic geometry 4. V. Title: Algebraic geometry four. VI. Series.
QA179.A4413 1994 512'.2—dc20 93-13928

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilm or in any other way, and storage in data banks. Duplication of this publication or parts thereof is permitted only under the provisions of the German Copyright Law of September 9, 1965, in its current version, and permission for use must always be obtained from Springer-Verlag. Violations are liable for prosecution under the German Copyright Law.

© Springer-Verlag Berlin Heidelberg 1994
Originally published by Springer-Verlag Berlin Heidelberg New York in 1994
Softcover reprint of the hardcover 1st edition 1994
Typesetting: Asco Trade Typesetting Ltd., Hong Kong
SPIN: 10013453 41/3140 - 5 4 3 2 1 0 - Printed on acid-free paper

Contents

I. Linear Algebraic Groups

T. A. Springer

1

II. Invariant Theory

V. L. Popov, E. B. Vinberg

123

Author Index

279

Subject Index

282