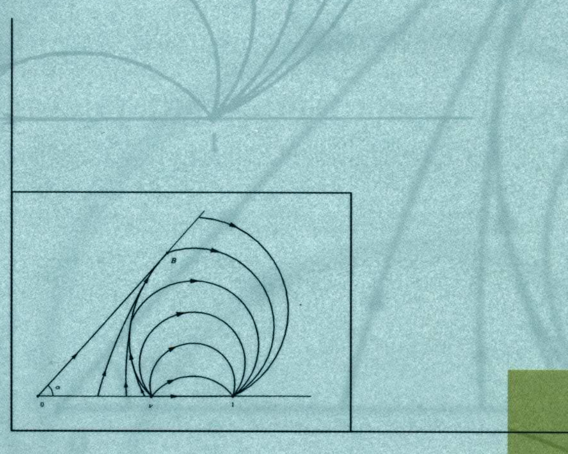
Generalized Characteristics of First Order PDEs

Applications in Optimal Control & Differential Games



Arik Melikyan

To the memory
of my parents
Shoushanik and Artavazd

A.A. Melikyan

Generalized Characteristics of First Order PDEs

Applications in Optimal Control and Differential Games

1998

Birkhäuser

Boston • Basel • Berlin

Arik Melikyan
Russian Academy of Science
Institute for Problems in Mechanics
Prospekt vernadskogo 101
Moscow

Library of Congress Cataloging-in-Publication Data

Melikyan, A. A. (Arik A.), 1944-
Generalized characteristics of first order PDEs : applications in optimal control and differential games / A.A. Melikyan.
p. cm.
Includes bibliographical references and index.
ISBN 0-8176-3984-5
1. Differential equations, Partial. 2. Control theory.
3. Differential games. I. Title.
QA374.M45 1998
515'.353--dc21 98-4739
CIP

Printed on acid-free paper

Birkhäuser

ISBN 0-8176-3984-5
ISBN 3-7643-3984-5
Typeset by the Author in LaTeX.
Printed and bound by Hamilton Printing, Rensselaer, NY.
Printed in the U.S.A.

9 8 7 6 5 4 3 2 1

Contents