

## CONTENTS

Preface	v
Contents	vii
Ch. 1. On a derivation of the Boltzmann equation <i>O.E. Lanford III</i>	1
Ch. 2. Global existence proofs for the Boltzmann equation <i>W. Greenberg, J. Polewczak and P. F. Zweifel</i>	19
Ch. 3. Exact solutions of the nonlinear Boltzmann equation and related kinetic equations <i>M.H. Ernst</i>	51
Ch. 4. Solution of the Boltzmann equation <i>C. Cercignani</i>	121
Ch. 5. Fluid dynamics and the Boltzmann equation <i>R.E. Caflisch</i>	193
Ch. 6. Fluctuation theory for the Boltzmann equation <i>H. Spohn</i>	225
Subject Index	253