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Models ; 3.5 Conclusion ; 3.6 References
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4.1 Introduction ; 4.2 Splitting and Energy Formulation ; 4.3 Working in a Finite Energy Interval ; 4.4 Energy Discretization and Kinetic Model
4.5 Conservation and Euler Equations for the Discretized Model
4.6 Energy Formulation of the Collision Dynamics ; 4.7 Concluding Remarks ; 4.8 References ; Chapter 5. Semi-continuous Extended Kinetic Theory ; 5.1 Introduction ; 5.2 Continuous Kinetic Equations
5.3 Semi-continuous Kinetic Equations

Sommario/riassunto

This book presents contributions on the following topics: discretization methods in the velocity and space, analysis of the conservation properties, asymptotic convergence to the continuous equation when the number of velocities tends to infinity, and application of discrete models. It consists of ten chapters. Each chapter is written by applied mathematicians who have been active in the field, and whose scientific contributions are well recognized by the scientific community.
Contents:
From the Boltzmann Equation to Discretized Kinetic Models (N Bellomo & R Gatignol)