Unified Non-Local Theory of Transport Processes. Edition No. 2

Description:
Unified Non-Local Theory of Transport Processes, 2nd Edition provides a new theory of transport processes in gases, plasmas and liquids. It is shown that the well-known Boltzmann equation, which is the basis of the classical kinetic theory, is incorrect in the definite sense. Additional terms need to be added leading to a dramatic change in transport theory. The result is a strict theory of turbulence and the possibility to calculate turbulent flows from the first principles of physics.

- Fully revised and expanded edition, providing applications in quantum non-local hydrodynamics, quantum solitons in solid matter, and plasmas
- Uses generalized Boltzmann kinetic theory as an highly effective tool for solving many physical problems beyond classical physics
- Addresses dark matter and energy
- Presents non-local physics in many related problems of hydrodynamics, gravity, black holes, nonlinear optics, and applied mathematics

Contents:
Preface
Historical Introduction and the Problem Formulation
Chapter 1: Generalized Boltzmann Equation
Chapter 2: Theory of Generalized Hydrodynamic Equations
Chapter 3: Quantum Non-Local Hydrodynamics
Chapter 4: Application of Unified Non-Local Theory to the Calculation of the Electronc and Proton Inner Structures
Chapter 5: Non-Local Quantum Hydrodynamics in the Theory of Plasmoids and the Atom Structure
Chapter 6: Quantum Solitons in Solid Matter
Chapter 7: Generalized Boltzmann Physical Kinetics in Physics of Plasma
Chapter 8: Physics of a Weakly Ionized Gas
Chapter 9: Generalized Boltzmann Equation in the Theory of the Rarefied Gases and Liquids
Chapter 10: Strict Theory of Turbulence and Some Applications of the Generalized Hydrodynamic Theory
Chapter 11: Astrophysical Applications
Chapter 12: The Generalized Relativistic Kinetic and Hydrodynamic Theory
Appendix 1: Perturbation Method of the Equation Solution
Appendix 2: Using of Curvilinear Coordinates in the Generalized Hydrodynamic Theory
Appendix 3: Characteristic Scales in Plasma Physics
Appendix 4: Dispersion Relations in the Generalized Boltzmann Kinetic Theoery Neglecting the Integral Collision Term
Appendix 5: Three-Diagonal Method of Gauss Elimination Techniques for the Differential Third and Second Order Equations
Appendix 6: Some Integral Calculations in the Generalized Navier Stokes Approximation
Appendix 7: Derivation of Energy Equation
References
Index

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