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Nota di contenuto	Part I Tools and Problems -- 1 Elements of functional analysis and distributions -- 2 Statements of the problems of Chapter 1 -- 3 Functional spaces -- 4 Statements of the problems of Chapter 3 -- 5 Microlocal analysis -- 6 Statements of the problems of Chapter 5 -- 7 The classical equations -- 8 Statements of the problems of Chapter 7 -- Part II Solutions of the Problems. A Classical results. Index.
Sommario/riassunto	This textbook offers a unique learning-by-doing introduction to the modern theory of partial differential equations. Through 65 fully solved problems, the book offers readers a fast but in-depth introduction to the field, covering advanced topics in microlocal analysis, including pseudo- and para-differential calculus, and the key classical equations, such as the Laplace, Schrödinger or Navier-Stokes equations. Essentially self-contained, the book begins with problems on the necessary tools from functional analysis, distributions, and the theory of functional spaces, and in each chapter the problems are preceded by a summary of the relevant results of the theory. Informed by the authors' extensive research experience and years of teaching, this book is for graduate students and researchers who wish to gain real working knowledge of the subject.

