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Nota di contenuto	Preface; Contents; Chapter 1 Vector Calculus; Chapter 2 Functions of a Complex Variable; Chapter 3 Integral Transforms; Chapter 4 Asymptotic Expansion of Integrals; Chapter 5 The Wiener-Hopf Technique; Chapter 6 Waveguides; Chapter 7 Wavefield Decomposition; Chapter 8 Acoustics of Rigid-Porous Materials; Chapter 9 Generalised Functions in Aeroacoustics; Chapter 10 Monopoles, Dipoles, and Quadrupoles; Chapter 11 Corrugated Pipe Flow; Chapter 12 Digital Filters; Chapter 13 Measurement of Linear Time-Invariant Systems; Chapter 14 Numerical Optimisation; Index
Sommario/riassunto	This book aims to give a thorough grounding in the mathematical tools necessary for research in acoustics. Twelve authors, all highly-respected researchers in the field of acoustics, provide a comprehensive introduction to mathematical analysis and its applications in acoustics, through material developed for a summer school in mathematics for acoustics researchers funded by the UK Engineering and Physical Sciences Research Council. Mathematical Methods, Wave Motion, Aeroacoustics and Signal Processing are covered in fourteen chapters by authors including Keith Attenborough (Hull), John

