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Sommario/riassunto	Inverse problems are an important and rapidly developing direction in mathematics, mathematical physics, differential equations, and various applied technologies (geophysics, optic, tomography, remote sensing, radar-location, etc.). In this monograph direct and inverse problems for partial differential equations are considered. The type of equations focused are hyperbolic, elliptic, and mixed (elliptic-hyperbolic). The direct problems arise as generalizations of problems of scattering

plane elastic or acoustic waves from inhomogeneous layer (or from half-space). The inverse problems are those of determination of medium parameters by giving the forms of incident and reflected waves or the vibrations of certain points of the medium. The method of research of all inverse problems is spectral-analytical, consisting in reducing the considered inverse problems to the known inverse problems for the Sturm-Liouville equation or the string equation. Besides the book considers discrete inverse problems. In these problems an arbitrary set of point sources (emissive sources, oscillators, point masses) is determined.