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Sogget	ti	Partial differential equations
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Nota di	contenuto	1 Preliminaries 2 Uniqueness of continuation and Cauchy problems 3 Determining the surface impedance of an obstacle from the scattering amplitude 4 Determining a corrosion coecient from a boundary measurement and an attenuation coecient from an internal measurement.
Sommario/riassunto		This book presents a unified approach to studying the stability of both elliptic Cauchy problems and selected inverse problems. Based on elementary Carleman inequalities, it establishes three-ball inequalities, which are the key to deriving logarithmic stability estimates for elliptic Cauchy problems and are also useful in proving stability estimates for certain elliptic inverse problems. The book presents three inverse problems, the first of which consists in determining the surface impedance of an obstacle from the far field pattern. The second

problem investigates the detection of corrosion by electric
measurement, while the third concerns the determination of an
attenuation coefficient from internal data, which is motivated by a
problem encountered in biomedical imaging.