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Sommario/riassunto	Inverse problems lie at the core of scientific discovery, enabling us to determine causes from observed consequences. They are fundamental to both theoretical research and technological innovation, making them a central topic in the mathematical sciences. This book explores a cutting-edge area of inverse problems—those related to integro-differential operators, also known as nonlocal operators. Due to their unique theoretical properties and vast practical applications, nonlocal inverse problems have garnered significant interest in recent years,

making this an ideal time for a dedicated research monograph. Focusing on nonlocality in space, this book provides a systematic study of both forward and inverse problems associated with integro-differential operators. It introduces key properties of forward problems—well-posedness, maximum principles, and unique continuation—before delving into inverse problems, including modeling, unique identifiability, stability analysis, and reconstruction methods. The discussion bridges mathematical theory with real-world applications, offering insights into pioneering contributions as well as recent advances by the authors and their collaborators. As an evolving field, nonlocal inverse problems present a wealth of open challenges and emerging applications. This book not only provides a comprehensive introduction but also aims to inspire future research with fresh perspectives and novel insights. It is an invaluable resource for graduate students and early-career researchers looking to enter the field, as well as a valuable reference for experienced mathematicians working in inverse problems and mathematical analysis.