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Sommario/riassunto	This book delves into the intricate world of fixed point theory, focusing on the Krasnoselskii-Mann method to tackle common fixed point problems within a finite family of quasi-nonexpansive mappings in hyperbolic metric spaces. By exploring various iterative algorithms, including the Cimmino algorithm and dynamic string-averaging methods, this volume offers a comprehensive study of convergence and approximate solutions amidst computational errors. Key concepts such as W-hyperbolic spaces, convex combinations, and set-valued inclusions are meticulously examined. The author presents a detailed analysis of iterative methods, highlighting their effectiveness in solving

complex fixed-point problems. Readers will encounter critical discussions on the behavior of exact and inexact iterates, the role of computational errors, and innovative approaches like remotest set control. This book invites readers to engage with challenging questions about convergence and solution accuracy in mathematical spaces. Ideal for researchers and scholars in mathematics and related fields, this book provides valuable insights into advanced iterative methods for solving fixed-point problems. Whether you are a mathematician specializing in nonlinear analysis or an academic exploring optimization theory, this volume is an essential resource for understanding the latest developments in fixed point theory.