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Sommario/riassunto

What are Einstein's field equations? Can they be understood without a physics degree? This book provides the answer. With care and clarity, the author offers scientifically curious readers an accessible path into Einstein's theories of relativity. Only high school-level knowledge is assumed, making the material approachable for anyone with a strong interest in science. Readers explore both the physical phenomena and the mathematical techniques needed to grasp Einstein's theory of gravity on a quantitative level. Step by step, the book guides readers toward answers to fundamental questions about General Relativity: How does Einstein's theory of gravity differ from Newton's? How can gravitational attraction be described geometrically? How can a black hole "swallow" light? Michael Ruhrländer studied mathematics at the University of Essen and earned his doctorate in Wuppertal, Germany. He then worked in the financial services industry and has been a lecturer in mathematics and statistics at the University of Applied Sciences Bingen from 2010 to 2020. He shares his passion for mathematics and physics through his clearly written textbooks and popular science publications.
