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Sommario/riassunto

This book is dedicated to Dr. Benjamin William Remondi for many reasons. The project of writing a Global Positioning System (GPS) book was con- ceived in April 1988 at a GPS meeting in Darmstadt, Germany. Dr. Remondi discussed with me the need for an additional GPS textbook and suggested a possible joint effort. In 1989, I was willing to commit myself to such a project. Unfortunately, the timing was less than ideal for Dr. Remondi. Therefore, I decided to start the project with other coauthors. Dr. Remondi agreed and indicated his willingness to be a reviewer. I selected Dr. Herbert Lichtenegger, my colleague from the Technical University Graz, Austria, and Dr. James Collins from Rockville, Maryland, U.S.A. In my opinion, the knowledge of the three authors should cover the wide spectrum of GPS. Dr. Lichtenegger is a geodesist with broad experience in both theory and practice. He has specialized his research to geodetic astron- omy including orbital theory and geodynamical phenomena. Since 1986, Dr. Lichtenegger's main interest is dedicated to GPS. Dr. Collins retired from the U.S. National Geodetic Survey in 1980, where he was the Deputy Director. For the past ten years, he has been deeply involved in using GPS technology with an emphasis on surveying. Dr. Collins was the founder and president of Geo/Hydro Inc. My own background is theoretically oriented. My first chief, Prof. Dr. Peter Meissl, was an excellent theoretician; and my former chief, Prof. Dr.mult. Helmut Moritz, fortunately, still is.