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Titolo	Understanding gravitational waves // C. R. Kitchin
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ISBN	3-030-74207-5
Descrizione fisica	1 online resource (422 pages)
Collana	Astronomers' Universe
Disciplina	539.754
Soggetti	Gravitational waves
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Preface -- Read This Before You Jump-in at the Deep End -- How to Read This Book -- Numbers -- Units -- Constants, Definitions, Quantities, Symbols and Units -- Topicality -- Contents -- 1: 14th September 2015 -- On the Significance of 1/400 of a Proton's Diameter -- What, Then Caused {10} GW150914? -- 2: Gravity: From 850,000,000 BCE to 1915 CE -- From Pre-History to Galileo -- Introduction -- In the Beginning -- Galileo -- Brahe and Kepler -- Newton -- Newton to Einstein: The Interregnum -- The Gravitational Constant -- Different Types of Mass: The Equivalence Principle -- Into the Nineteenth Century: And the Discrepancies Start to Appear -- Uranus' Positional Anomaly -- Mercury's Perihelion Positional Anomaly -- 3: Gravity: From 1915-Through Today-And on Towards Tomorrow -- Einstein -- Relativity -- Special Relativity -- General Relativity -- But What About Spacecraft? -- General Relativity: The Small Print -- General Relativity: The Nitty Gritty -- Testing General Relativity -- Mercury's Perihelion Problem: First Test -- The Bending of Light Beams: Second Test -- Gravitational Lensing -- Gravitational Redshift: Third Test -- The Shapiro Effect: Fourth Test -- Rotating Frames of Reference -- Gravity into the Future -- 4: Gravitational Waves: The Long, Long Journey from Half-Seen Chimeras to Highly Studied Certainties -- Introduction -- Gravitational Waves up to Einstein -- Gravitational Waves After Einstein -- Gravitational Waves: The Real Thing -- 5: Gravitational Waves: Origins and Sources -- Introduction -- Potentially Observable Sources of Gravitational Waves -- Burst Type Gravitational

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