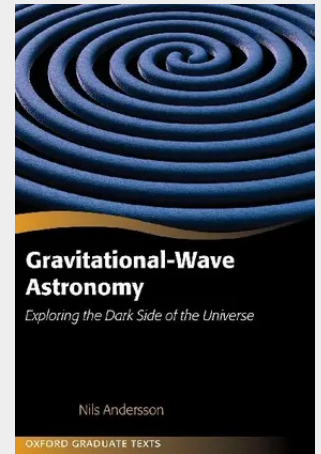


Gravitational-Wave Astronomy

Exploring the Dark Side of the Universe

This book is an introduction to gravitational waves and related astrophysics. It provides a bridge across the range of astronomy, physics and cosmology that comes into play when trying to understand the gravitational-wave sky. Starting with Einstein's theory of gravity, chapters develop the key ideas step by step, leading up to the technology that finally caught these faint whispers from the distant universe. The second part of the book makes a direct connection with current research, introducing the relevant language and making the involved concepts less mysterious. The book is intended to work as a platform, low enough that anyone with an elementary understanding of gravitational waves can scramble onto it, but at the same time high enough to connect readers with active research - and the many exciting discoveries that are happening right now. The first part of the book introduces the key ideas, following a general overview chapter and including a brief reminder of Einstein's theory. This part can be taught as a self-contained one semester course. The second part of the book is written to work as a collection of "set pieces" with core material that can be adapted to specific lectures and additional material that provide context and depth. A range of readers may find this book useful, including graduate students, astronomers looking for basic understanding of the gravitational-wave window to the universe, researchers analysing data from gravitational-wave detectors, and nuclear and particle physicists.

This introduction to gravitational waves and related astrophysics provides a bridge across the range of astronomy, physics and cosmology that comes into play when trying to understand the gravitational-wave sky. Key ideas are developed step by step, leading up to the technology that caught these faint whispers from the distant universe.



167,40 €

167,40 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780198568032

Medium: Buch

ISBN: 978-0-19-856803-2

Verlag: OXFORD UNIV PR

Erscheinungstermin: 20.01.2020

Sprache(n): Englisch

Auflage: Erscheinungsjahr 2020

Produktform: Gebunden

Gewicht: 1333 g

Seiten: 688

Format (B x H): 175 x 250 mm

