

"...an excellent textbook, with a clear and pedagogical presentation. The additions in this second edition, such as galaxy formation and baryon acoustic oscillations, are valuable and bring the book even more up-to-date."

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"Barbara Ryden writes in a very clear and engaging style. This transparency has inspired many undergraduate science majors in my cosmology class to pursue additional coursework and research in astrophysics."

Professor Crystal Martin, *University of California, Santa Barbara*

"[This] book paints an elegant mathematical picture of the evolution of the universe from the Big Bang to the formation of stars. Ryden does a masterful job of paring cosmology down to its most fundamental elements and presenting complex topics with exceptional clarity."

Christy Tremonti, *University of Wisconsin, Madison*

The second edition of *Introduction to Cosmology* is an exciting update of this award-winning textbook. It is aimed primarily at advanced undergraduate students in physics and astronomy, but is also useful as a supplementary text at higher levels. It explains modern cosmological concepts, such as dark energy, in the context of the Big Bang theory. Its clear, lucid writing style, with a wealth of useful everyday analogies, makes it exceptionally engaging. Emphasis is placed on the links between theoretical concepts of cosmology and the observable properties of the universe, building deeper physical insights in the reader. The second edition includes:

- up-to-date observational results;
- fuller descriptions of special and general relativity;
- expanded discussions of dark energy;
- a new chapter on baryonic matter that makes up stars and galaxies.

It is an ideal textbook for the era of precision cosmology in the accelerating universe.



Online Resources
www.cambridge.org/cosmology

For instructors use:

- ▶ PowerPoint slides and JPEGs of figures and tables from the book
- ▶ Solutions manual available as PDF

Cover image: Large scale projection through the Illustris volume at $z = 0$, centered on the most massive cluster, 15 Mpc/h deep. It shows dark matter density (left) transitioning to gas density (right) [Credit: Illustris Collaboration]

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