

1. Record Nr.	UNINA9910731412903321
Titolo	Philosophy of Astrophysics : Stars, Simulations, and the Struggle to Determine What is Out There // edited by Nora Mills Boyd, Siska De Baerdemaeker, Kevin Heng, Vera Matarese
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-26618-8
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (XII, 332 p. 1 illus.)
Collana	Synthese Library, Studies in Epistemology, Logic, Methodology, and Philosophy of Science, , 2542-8292 ; ; 472
Disciplina	501
Soggetti	Science—Philosophy Astronomy Molecules—Models Knowledge, Theory of Astronomy—Observations Philosophy of Science Astronomy, Cosmology and Space Sciences Molecular Modelling Epistemology Astronomy, Observations and Techniques
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Introduction (Vera Matarese, Siska De Baerdemaeker, and Nora Mills Boyd) -- Part I: Theory, Observation, and the Relation Between Them. 2. Laboratory Astrophysics: Lessons for Epistemology of Astrophysics (Nora Mills Boyd) -- 3. A Crack in the Track of the Hubble Constant (Marie Gueguen) -- 4. Theory Testing in Gravitational-Wave Astrophysics (Jamee Elder) -- 5. Hybrid Enrichment of Theory and Observation in Next-Generation Stellar Population Synthesis (Lydia Patton) -- 6. Doing More with Less: Dark Matter & Modified Gravity (Niels C. M. Martens and Martin King) -- Part II: Models and Simulations. 7. Stellar Structure Models Revisited: Evidence and Data in Asteroseismology (Mauricio Suárez) -- 8. Idealizations in Astrophysical

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Sommario/riassunto

This is an open access book. This book, the first edited collection of its kind, explores the recent emergence of philosophical research in astrophysics. It assembles a variety of original essays from scholars who are currently shaping this field, and it combines insightful overviews of the current state of play with novel, significant contributions. It therefore provides an ideal source for understanding the current debates in philosophy of astrophysics, and it offers new ideas for future cutting-edge research. The selection of essays offered in this book addresses methodological and metaphysical questions that target a wide range of topics, including dark matter, black holes, astrophysical observations and modelling. The book serves as the first standard resource in philosophy of astrophysics for all scholars who work in the field and want to expand or deepen their knowledge, but it also provides an accessible guide for all those philosophers and scientists who are interested in getting a first, basic understanding of the main issues in philosophy of astrophysics.
