

1. Record Nr.	UNINA9910686473203321
Autore	Longair Malcolm S. <1941->
Titolo	Galaxy formation / / Malcolm S. Longair
Pubbl/distr/stampa	Berlin, Germany : , : Springer, , [2023] ©2023
ISBN	9783662658918 9783662658901
Edizione	[Third edition.]
Descrizione fisica	1 online resource (784 pages)
Collana	Astronomy and astrophysics library
Disciplina	050
Soggetti	Astrophysics Cosmology Galaxies - Formation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part I Preliminaries -- A Very Brief History of Cosmology and Galaxy Formation -- The Large Scale Structure of the Universe -- Galaxies -- Clusters of Galaxies -- Part II The Basic Framework -- The Theoretical Framework -- An Introduction to Relativistic Gravity -- The Friedman World Models -- The Determination of Cosmological Parameters -- The Thermal History of the Universe -- Nucleosynthesis in the Early Universe -- Part III The Development of Primordial Fluctuations under Gravity -- The Evolution of Density Perturbations in the Standard Big Bang -- More Tools and Problems -- Dark Matter and Galaxy Formation -- Correlation Functions and the Spectrum of the Initial Fluctuations -- The Cosmic Microwave Background Radiation -- The Post-Recombination Era -- The Evolution of Galaxies and Active Galaxies with Cosmic Epoch -- The Intergalactic Medium -- Making Real Galaxies -- The Very Early Universe. .
Sommario/riassunto	This third edition of Malcolm Longair's highly acclaimed textbook, Galaxy Formation, is an up-to-date text on astrophysical cosmology expounding the structure of classical cosmological models from a contemporary viewpoint. This forms the background to a detailed study of the origin of structure and galaxies in the Universe. The derivations of many of the most important results are described using simple

physical arguments which illuminate the results of more advanced treatments. A very wide range of recent observational data is brought to bear upon the problems, including the results from the Hubble Space Telescope, the Planck mission of the European Space Agency, galaxy surveys such as the Sloan Digital Sky Survey, the ALMA submillimetre observatory, studies of Type 1a supernovae and many other remarkable recent observations. This book serves as an ideal text for graduate level courses on astrophysical cosmology and is also highly appreciated as a reference source for professional astrophysicist and cosmologists.
