

1. Record Nr.	UNINA9910412152603321
Titolo	Tutorial Guide to X-ray and Gamma-ray Astronomy [[electronic resource]] : Data Reduction and Analysis // edited by Cosimo Bambi
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-6337-3
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (IX, 279 p. 152 illus., 95 illus. in color.)
Disciplina	523.01
Soggetti	Observations, Astronomical Astronomy—Observations Astrophysics Astronomy, Observations and Techniques Astrophysics and Astroparticles
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The High Energy Window -- Emission processes in Active Galactic Nuclei -- AGN as a high energy laboratory -- How to detect X-rays and gamma-rays from space: optics and detectors -- Past, present, and future X-ray and gamma-ray missions -- From raw data to scientific products: images, light curves and spectra -- Statistics -- Data analysis (tutorials in the appendices) -- How to put your data analysis and interpretation into a scientific paper.
Sommario/riassunto	This book provides a comprehensive introduction to X-ray and gamma-ray astronomy. The first part discusses the basic theoretical and observational topics related to black hole astrophysics; the optics and the detectors employed in X-ray and gamma-ray astronomy; and past, present, and future X-ray and gamma-ray missions. The second part then describes data reduction and analysis, the statistics used in X-ray and gamma-ray astronomy, and demonstrates how to write a successful proposal and a scientific paper. Data reduction in connection with specific X-ray and gamma-ray missions is covered in the appendices. Presenting the state of the art in X-ray and gamma-ray astronomy, this is both a valuable textbook for students and an important reference resource for researchers in the field.

