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Titolo	The emission-line universe : XVIII Canary Islands Winter School of Astrophysics / / edited by Jordi Cepa [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2008
ISBN	1-107-20222-1 1-281-98251-2 9786611982515 0-511-46435-5 0-511-46277-8 0-511-46509-2 0-511-46202-6 0-511-55203-3 0-511-46356-1
Descrizione fisica	1 online resource (xii, 296 pages) : digital, PDF file(s)
Collana	Canary Islands Winter School of Astrophysics
Disciplina	523.1/12
Soggetti	Emission-line galaxies Active galactic nuclei
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Cover; Half-title; Title; Copyright; Contents; Contributors; Participants; Preface; Acknowledgements; 1. What can emission lines tell us?; 2. The observer's perspective: Emission-line surveys; 3. The astrophysics of early galaxy formation; 4. Primeval galaxies; 5. Active galactic nuclei; 6. Chemical evolution; 7. Galactic sources of emission lines; 8. Narrow-band imaging; 9. Long-slit spectroscopy; 10. Basic principles of tunable filters
Sommario/riassunto	Emission lines provide a powerful tool to study the physical properties and chemical compositions of astrophysical objects in the Universe, from the first stars to objects in our galaxy. The analysis of emission lines allows us to estimate the star formation rate and initial mass function of ionizing stellar populations, and the properties of active galactic nuclei. This book presents lectures from the eighteenth Winter

School of the Canary Islands Astrophysics Institute (IAC), devoted to emission lines and the astrophysical objects that produce them. Written by prestigious researchers and experienced observers, it covers the formation of emission lines and the different sources that produce them. It shows how emission lines in different wavelengths, from ultraviolet to near infrared, can provide essential information on understanding the formation and evolution of astrophysical objects. It also includes practical tutorials for data reduction, making this a valuable reference for researchers and graduate students.

2. Record Nr.	UNINA9910300384403321
Autore	Schmidt Wolfram
Titolo	Numerical Modelling of Astrophysical Turbulence / / by Wolfram Schmidt
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-01475-7
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (98 p.)
Collana	SpringerBriefs in Astronomy, , 2191-9100
Disciplina	519 620.1 620.1064
Soggetti	Astrophysics Physics Applied mathematics Engineering mathematics Fluids Astrophysics and Astroparticles Numerical and Computational Physics, Simulation Mathematical and Computational Engineering Fluid- and Aerodynamics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.

Nota di contenuto

Turbulence theory -- Simulation techniques -- Phenomenology and statistics -- Complex processes.

Sommario/riassunto

In this "SpringerBrief" the author considers the underlying problems and questions that are common to numerical models of turbulence in different astrophysical systems. Turbulence has emerged as an important research topic in several areas of astrophysics.

Understanding and modeling turbulence is particularly important for the dynamics of the interstellar medium, but also for the intergalactic medium, as well as in stars. The advancement of methods for numerical simulations of astrophysical turbulence, however, is still challenging because of gravity, strong compressibility, magnetic fields, and other effects. The book begins with a review of general aspects of numerical simulations of turbulence. In the main part the author presents findings from his numerical studies on astrophysical turbulence and discusses the astrophysical implications. He also explains in detail the numerical schemes utilized. Readers will find that this book offers a compact yet comprehensive introduction.