Record Nr. UNINA9910819509203321 Autore Cochard Francois Titolo Successfully starting in astronomical spectroscopy: a practical guide / / Francois Cochard Pubbl/distr/stampa Les Ulis, France:,: EDP Sciences,, [2018] ©2018 **ISBN** 2-7598-2248-6 Descrizione fisica 1 online resource Collana **PROfile** Disciplina 522.67 Soggetti Astronomical spectroscopy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto Frontmatter -- Contents -- Acknowledgements -- Preface --Introduction -- Chapter 1 Entering the Realm of Amateur Astronomical Spectroscopy -- Chapter 2 Light -- Chapter 3 What Light Tells us about Stars -- Chapter 4 What can I Observe with my Instrument? -- Chapter 5 Optical Principles of a Spectroscope -- Chapter 6 Main Parameters of a Spectroscope -- Chapter 7 CCD Cameras and Acquisition Softwares -- Chapter 8 Adjusting the Spectroscope on a Table -- Chapter 9 Physical Measurements and Data Reduction -- Chapter 10 First Spectroscopic Observation: The Sun -- Chapter 11 Mastering the Telescope -- Chapter 12 Installing the Spectroscope on the Telescope -- Chapter 13 Spectroscopic Observation of another Star -- Chapter 14 Quality of the Spectrum -- Chapter 15 Ready for the Adventure --Conclusion -- Glossary -- References -- Index You have decided to jump into astronomical spectroscopy, or you are Sommario/riassunto thinking about it. If you wish to understand how to start, to go deeper, or simply increase your knowledge and improve your results, then this book is made for you! Amateur interest in Astronomical spectroscopy is on the rise. More and more amateur astronomers are diving into the adventure. Getting a star spectrum, today is easily feasible, with modest equipment – if you have a method, and go step by step. This book is a guide; it is very practical. It addresses all the issues required to quickly assist you in obtaining quality spectra with a slit

spectroscope. We talk about astrophysics and optics, but it is not an

astrophysical or optical course. No prerequisite is needed. A big part of the book is dedicated to the setup of your equipment and to obtaining spectra in the field. This is often where beginners face problems: one needs to make several devices (telescope, spectroscope, camera...) work together. Little by little, you'll learn how to get your first spectra, to perform data reduction, and to look at your spectra with more and more expectations – up to the moment when you realize that you're doing real science. « The book you are about to read is remarkable in the sense that it makes the foundations of astronomical spectroscopy accessible to all and provides practical advice for its application. It will without doubt give you the desire to embark on this great adventure, and provides you the means to achieve it. » extract from the preface written by Claude Catala, President of the Observatoire de Paris