

Orion Autoguider Sale

The Orion Telescope Observer's Guide highlights over sixty interesting objects for budding amateur astronomers to find and observe in a small telescope. We'll help you explore objects such as star clusters, multiple stars, nebulae, and even the Andromeda Galaxy! Helpful maps of each target object are included, as are examples of what the object will look like in a typical finderscope, and depictions of the view you'll see in a telescope eyepiece. The author also includes a realistic description of every object based upon his own notes written over years of observations. Written with the beginner in mind, the Orion Telescope Observer's Guide also includes vital tips and tricks to help you get the most out of the rewarding hobby of amateur astronomy. If you're new to stargazing with a small telescope, this book is your introduction to the stars!

Astrophotography can be one of the most rewarding pursuits of a lifetime, it can also be one of the most daunting. This book uses over 200 illustrations, images, charts and graphs in addition to the text to help you understand what equipment you will need and how to make it all work so you can create breathtaking images of the heavens. From purchasing your first astrophotography telescope, hooking up your camera, taking long exposure images, and finally processing that finished image, this book will be your indispensable guide. If you have ever wanted to take photographs of glowing nebulae, spiral galaxies and shimmering star clusters, this is the reference you want on your desk as well as with you out under the stars. I will take you on a journey exploring in-depth details of field rotation and focusing methods, as well as explaining not just the what and how, but the ever important why. Actually see why you stack multiple images and what effect it has. Don't just read about how the atmosphere affects imaging, see it through experimentation that you can do at home on your own!

The Astrophotography Manual is for those photographers who aspire to move beyond using standard SLR cameras and editing software, and who are ready to create beautiful images of nebulas, galaxies, clusters, and the solar system. Beginning with a brief astronomy primer, this book takes readers through the full astrophotography process, from choosing and using equipment through image capture, calibration, and processing. This combination of technical background information and the hands-on approach brings the science down to earth with a practical method to plan for success. Features include: Over 400 images, graphs, and tables to illustrate these concepts A wide range of hardware to be used, including smartphones, tablets, and the latest mount technologies How to utilize a variety of leading software such as Maxim DL, Nebulosity, Sequence Generator Pro, Photoshop, and PixInsight Case studies showing how and when to use certain tools and overcoming technical challenges How sensor performance and light pollution relate to image quality and exposure planning

In The Art of Astrophotography, astronomer and Popular Astronomy columnist Ian Morison provides the essential foundations of how to produce beautiful astronomical images. Every type of astroimaging is covered, from images of the Moon and planets, to the constellations, star clusters and nebulae within our Milky Way Galaxy and the faint light of distant galaxies. He achieves this through a series of worked examples and short project walk-throughs, detailing the equipment needed – starting with just a DSLR (digital single lens reflex) camera and tripod, and increasing in complexity as the book progresses - followed by the way to best capture the images and then how, step by step, these may be processed and enhanced to provide results that can rival those seen in astronomical magazines and books. Whether you are just getting into astrophotography or are already deeply involved, Morison's advice will help you capture and create enticing astronomical images.

Night Sky Almanac 2022: A stargazer's guide

The Observer's Sky Atlas

The Vixen Star Book User Guide

Wil Tirion's Bright Star Atlas 2000.0

The Cambridge Star Atlas

The Deep-sky Imaging Primer

Choosing and Using a New CAT

Provides easy to understand information and guidelines about the design and construction of binoscopes Focusing on both homemade and commercial products, this book provides the reader with simple and straightforward information about the modelling and building of binoscopes. Binoscopes can be thought of as binoculars enlarged to the size of telescopes: essentially, a combination of the two. Constructing a binoscope is easier than most people think, but it still demands attention to detail and proper background knowledge. The author goes on to provide additional information about how to understand the products currently on the market, should the reader choose to purchase a binoscope instead of building one. Lastly, the book also compares binoscopes with telescopes in great detail, outlining the differences the reader can expect to see in the night sky from using both. The celestial views obtained with a binoscope, compared to a single telescope of the same aperture, are a very different experience and well worth the effort.

PixInsight has taken the astro-imaging world by storm. As the first comprehensive postprocessing platform to be created by astro-imagers for astro-imagers, it has for many replaced other generic graphics editors as the software of choice. PixInsight has been embraced by professionals such as the James Webb (and Hubble) Space Telescope's science imager Joseph DePasquale and Calar Alto's Vicent Peris, as well as thousands of amateurs around the world. While PixInsight is extremely powerful, very little has been printed on the subject. The first edition of this book broke that mold, offering a comprehensive look into the software's capabilities. This second edition expands on the several new processes added to the PixInsight platform since that time, detailing and demonstrating each one with a now-expanded workflow. Addressing topics such as PhotometricColorCalibration, Large-Scale Pixel Rejection, LocalNormalization and a host of other functions, this text remains the authoritative guide to PixInsight.

This book is for anyone who owns, or is thinking of owning, a Vixen Star Book Ten telescope mount or its predecessor. A revolution in amateur astronomy has occurred in the past decade with the wide availability of high tech, computer-driven, Go-To telescopes. Vixen Optics is leading the way by offering the Star Book Ten system, with its unique star map graphics software. The Star Book Ten is the latest version of computer telescope control using star map graphics as a user interface, first introduced in the original Star Book first offered in 2003. The increasingly

complicated nature of this software means that learning to optimize this program is not straightforward, and yet the resulting views when all features are correctly deployed can be phenomenal. After a short history of computerized Go-To telescopes for the consumer amateur astronomer market, Chen offers a treasury of technical information. His advice, tips, and solutions aid the user in getting the most out of the Star Book Ten system in observing sessions.

For anyone who's ever looked at the night sky and wanted to know more about the galaxy around them, *The Practical Astronomer* offers a comprehensive guide to discovering and understanding the mysteries of the solar system and beyond. Illustrated with specially commissioned photography and artwork, and using clear, easy-to-follow text, *The Practical Astronomer* takes you on a step-by-step journey from the basics of what can be seen with the naked eye from your own backyard, to how you can view more distant objects such as the planets of the solar system, and even galaxies far, far away. The book opens with an explanation of the fundamentals of astronomy, detailing when, where, and how to look at the night sky. It goes on to cover the necessary equipment and clothing that the amateur astronomer needs, reviewing optical equipment such as binoculars and telescopes, how they work and how to use them. A special section focuses on photography and covers the "how-to's" of capturing beautiful images of what you see. *The Practical Astronomer* aims to foster an awareness and understanding of what you're looking at—be it a planet, star, or asteroid. Different sections are devoted to looking at how the night sky changes, whether that's because it's viewed from a different place in the world or at a different time of year. Star charts and detailed maps of the night sky are included to aid budding astronomers in their quest to know more about this fascinating subject.

A Maker's Guide

Telescope Observer's Guide

Choosing and Using a Refracting Telescope

Building and Using Binoscopes

How to Use the Star Book TEN and the Original Star Book

Choosing and Using Astronomical Eyepieces

With 50 Star Charts Covering the Entire Sky

Driven by discoveries, and enabled by leaps in technology and imagination, our understanding of the universe has changed dramatically during the course of the last few decades. The fields of astronomy and astrophysics are making new connections to physics, chemistry, biology, and computer science. Based on a broad and comprehensive survey of scientific opportunities, infrastructure, and organization in a national and international context, New Worlds, New Horizons in Astronomy and Astrophysics outlines a plan for ground- and space-based astronomy and astrophysics for the decade of the 2010's.

Realizing these scientific opportunities is contingent upon maintaining and strengthening the foundations of the research enterprise including technological development, theory, computation and data handling, laboratory experiments, and human resources. New Worlds, New Horizons in Astronomy and Astrophysics proposes enhancing innovative but moderate-cost programs in space and on the ground that will enable the community to respond rapidly and flexibly to new scientific discoveries. The book recommends beginning construction on survey telescopes in space and on the ground to investigate the nature of dark energy, as well as the next generation of large ground-based giant optical telescopes and a new class of space-based gravitational observatory to observe the merging of distant black holes and precisely test theories of gravity. New Worlds, New Horizons in Astronomy and Astrophysics recommends a balanced and executable program that will support research surrounding the most profound questions about the cosmos. The discoveries ahead will facilitate the search for habitable planets, shed light on dark energy and dark matter, and aid our understanding of the history of the universe and how the earliest stars and galaxies formed. The book is a useful resource for agencies supporting the field of astronomy and astrophysics, the Congressional committees with jurisdiction over those agencies, the scientific community, and the public.

This unique and informative text describes how stars are classified according to their spectral qualities and temperature. James Kaler explains the alphabet of stellar astronomy, running from cool M stars to hot O stars, and tells the story of their evolution. Before embarking on a voyage of cosmic discovery, the author discusses the fundamental properties of stars, their atomic structure and the formation of spectra. Then, Kaler considers each star type individually and explores its spectra in detail. A review of unusual, hard-to-classify stars, and a discussion of data related to the birth, life and death of stars round out the text. This book is an important resource for all amateur astronomers and students of astronomy. Professionals will find it a refreshing read as well.

Have you always wanted to explore the Moon like Neil Armstrong or the eleven other astronauts who have walked on its surface? You can tour the Moon from your own backyard with a small telescope or binoculars. This book will point you to the Sea of Tranquility (the landing spot for Apollo 11) and many other fascinating features you can spot on the Moon's surface. Beginning with the New Moon, as each day passes, an additional slice of the Moon becomes visible. With each new slice comes new craters, lunar seas and jagged mountain ranges. This easy-to-use, illustrated reference book enables everyone, young and old, to better appreciate our nearest neighbour in space.

There are currently thousands of amateur astronomers around the world engaged in astrophotography at a sophisticated level. Their ranks far outnumber professional astronomers doing the same and their contributions both technically and artistically are the dominant drivers of progress in the field today. This book is a unique collaboration of individuals world-renowned in their particular area and covers in detail each of the major sub-disciplines of astrophotography. This approach offers the reader the greatest opportunity to learn the most current information and the latest techniques directly from the foremost innovators in the field today. "Lessons from the Masters" includes a brilliant body of recognized leaders in astronomical imaging, assembled by Robert Gendler, who delivers the most current, sophisticated and useful information on digital enhancement techniques in astrophotography available today. Each chapter focuses on a particular technique, but the book as a whole covers all types of astronomical image processing, including

processing of events such as eclipses, using DSLRs, and deep-sky, planetary, widefield, and high resolution astronomical image processing. Recognized contributors include deep-sky experts such as Jay GaBany, Tony Hallas, and Ken Crawford, high-resolution planetary expert Damian Peach, and the founder of TWAN (The World at Night) Babak A. Tafreshi. A large number of illustrations (150, 75 in color) present the challenges and accomplishments involved in the processing of astronomical images by enthusiasts.

A User's Guide to the Meade LXD55 and LXD75 Telescopes

Care of Astronomical Telescopes and Accessories

Inside PixInsight

Astrophotography with Affordable Equipment and Software

The Products, Places, and People Directory

Getting the Most from Your Schmidt Cassegrain or Any Catadioptric Telescope

Star Ware

Choosing and Using a Refracting Telescope has been written for the many amateur astronomers who already own, or are intending to purchase, a refracting telescope – perhaps to complement their existing arsenal of larger reflecting telescopes – or for the specialist who requires a particular refractor for serious astronomical applications or nature studies. Four hundred year ago, during the winter of 1609, a relatively unknown Italian scientist, Galileo Galilei designed a spyglass with two crude lenses and turned it skyward. Since then, refractors have retained their dominance over all types of reflector in studies of the Moon, planets and double stars because of the precision of their optics and lack of a central obstruction in the optical path, which causes diffraction effects in all commercially-made reflectors. Most mature amateur astronomers got started with a 60mm refractor, or something similar. Thirty years ago, there was little choice available to the hobbyist, but in the last decade long focus crown-flint achromats have moved aside for some exquisitely crafted apochromatic designs offered by leading commercial manufacturers. There has been a huge increase in the popularity of these telescopes in the last few years, led by a significant increase in the number of companies (particularly, William Optics, Orion USA, StellarVue, SkyWatcher and AstroTech) who are now heavily marketing refractors in the amateur astronomical magazines. In **Choosing and Using a Refracting Telescope**, well-known observer and astronomy writer Neil English celebrates the remarkable history and evolution of the refracting telescope and looks in detail at the instruments, their development and their use. A major feature of this book is the way it compares not only different classes of refractor, but also telescopes of each class that are sold by various commercial manufacturers. The author is perhaps uniquely placed to do this, having used and tested literally hundreds of different refracting telescopes over three decades. Because it includes many diverse subjects such as imaging with consumer-level digital cameras, imaging with webcams, and imaging with astronomical CCD cameras – that are not covered together in equal depth in any other single volume – **Choosing and Using a Refracting Telescope** could become the ‘refractor bible’ for amateur astronomers at all levels, especially those who are interested in imaging astronomical objects of every class.

Orion Telescope Observer's Guide

This charming exploration of the night sky -- featuring a star finder and glow-in-the-dark stickers -- which has more than a quarter of a million young astronomers enjoying the night sky in countries around the world, is now completely revised and updated. **A Child's Introduction to the Night Sky** is the perfect introduction to the always fascinating world of astronomy. Children ages eight and up will find out what astronomers have learned (and are still discovering), what astronauts and scientists explore, and what they can find by gazing up into the sky at night. Author Michael Driscoll explains how stars are born, the achievements of the great scientists, the history of space exploration, the story of our solar system, the myths behind the constellations, how to navigate the night sky, and more. Whimsical color illustrations throughout and handy definitions and sidebars help engage younger readers and develop their interest. Also included are a nifty star finder tool and fun glow-in-the-dark stickers.

When the fuzzy indeterminacy of quantum mechanics overthrew the orderly world of Isaac Newton, Albert Einstein and Erwin Schrödinger were at the forefront of the revolution. Neither man was ever satisfied with the standard interpretation of quantum mechanics, however, and both rebelled against what they considered the most preposterous aspect of quantum mechanics: its randomness. Einstein famously quipped that God does not play dice with the universe, and Schrödinger constructed his famous fable of a cat that was neither alive nor dead not to explain quantum mechanics but to highlight the apparent absurdity of a theory gone wrong. But these two giants did more than just criticize: they fought back, seeking a Theory of Everything that would make the universe seem sensible again. In **Einstein's Dice and Schrödinger's Cat**, physicist Paul Halpern tells the little-known story of how Einstein and Schrödinger searched, first as collaborators and then as competitors, for a theory that transcended quantum weirdness. This story of their quest—which ultimately failed—provides readers with new insights into the history of physics and the lives and work of two scientists whose obsessions drove its progress. Today, much of modern physics remains focused on the search for a Theory of Everything. As Halpern explains, the recent discovery of the Higgs Boson makes the Standard Model—the closest thing we have to a unified theory—nearly complete. And while Einstein and Schrödinger failed in their attempt to explain everything in the cosmos through pure geometry, the development of string theory has, in its own quantum way, brought this idea back into vogue. As in so many things, even when they were wrong, Einstein and Schrödinger couldn't help but get a great deal right.

Einstein's Dice and Schrödinger's Cat

Current Concepts in Astronomical Image Processing

A New Way to See Them

A Practical Guide to Viewing the Universe
Lessons from the Masters
Stargazing Under Suburban Skies
A User's Guide

A valuable reference that fills a number of niches including that of a buyer's guide, technical desk reference and observer's field guide. It documents the past market and its evolution, right up to the present day. In addition to appealing to practical astronomers - and potentially saving them money - it is useful both as a historical reference and as a detailed review of the current market place for this bustling astronomical consumer product. What distinguishes this book from other publications on astronomy is the involvement of observers from all aspects of the astronomical community, and also the major manufacturers of equipment. It not only catalogs the technical aspects of the many modern eyepieces but also documents amateur observer reactions and impressions over the years, using many different eyepieces. Eyepieces are the most talked-about accessories and collectible items available to the amateur astronomer. No other item of equipment commands such vigorous debate, or has evolved into such a remarkable array of forms and functions. 'Choosing and Using Astronomical Eyepieces' provides a vast amount of reference material to point readers towards the best buys and the right eyepieces for different kinds of observing.

First published in 1999, this is an expanded and updated edition of the best-selling, standard handbook on astrophotography for amateurs.

This book is based around the author's beautiful and sometimes awe-inspiring color images and mosaics of deep-sky objects. The book describes how similar "Hubble class" images can be created by amateur astronomers in their back garden using commercially available telescopes and CCD cameras. Subsequent processing and image enhancement in the "electronic darkroom" is covered in detail as well. A range of telescopes and equipment is considered, from the author's 11-inch with Hyperstar camera, down to more affordable instruments. Appendices provide links to free software - not available from a single source - and are themselves an invaluable resource.

The Biographical Encyclopedia of Astronomers is a unique and valuable resource for historians and astronomers alike. The two volumes include approximately 1550 biographical sketches on astronomers from antiquity to modern times. It is the collective work of about 400 authors edited by an editorial board of 9 historians and astronomers, and provides additional details on the nature of an entry and some summary statistics on the content of entries. This new reference provides biographical information on astronomers and cosmologists by utilizing contemporary historical scholarship. Individual entries vary from 100 to 1500 words, including the likes of the superluminaries such as Newton and Einstein, as well as lesser-known astronomers like Galileo's acolyte, Mario Guiducci. A comprehensive contributor index helps researchers to identify the authors of important scientific topics and treatises.

New Worlds, New Horizons in Astronomy and Astrophysics

Lunar and Planetary Webcam User's Guide

Kope's Outer Space Directory

The Practical Astronomer

A Manual for the Astronomical Observer and Amateur Telescope Maker

How to Find the Best Objects the Night Sky has to Offer

Orion

Anyone interested in astronomy battles with the conveniences of modern living - street lights, advertising and security lighting, tall buildings, and even the occasional tree. More than 85% of the population now lives in crowded and light-polluted towns and cities. This book is for those who live in or near towns and cities and own relatively modest equipment, although observers with larger instruments will still find many of the target objects of interest. The book encourages the use of star-hopping techniques to find objects in the night sky. Included is a list of 100 popular deep sky objects, ranked according to how difficult they are to find. Each object is described and has companion star-hopping charts, images and sometimes sketches. As a result, readers can gain a sense of their own backyard view from Earth. There is also a top 30 list of lunar objects, a section on planetary observing, annotated lists of popular astronomy apps and software, and tips on how to make the most of your location. Stargazing Under Suburban Skies: A Star-Hopper's Guide is the essential companion to what can be seen and how, regardless of the obstacles.

This book offers a comprehensive introductory guide to "choosing and using" a series LXD55 or LXD75 computer-controlled ("goto") telescope, containing a wealth of useful information for both beginners and more advanced practical amateur astronomers. The manufacturer's manuals are not nearly detailed enough to be of real help to beginners. No other book offers advanced techniques for more experienced LXD series users.

Provides entries for space-related organizations

Can you remember being impressed by a clear starry sky? Look at the Milky Way through binoculars and it will reveal its many hundreds of thousands of stars, double stars, stellar clusters, and nebulae. If you are a new observer, it is not that easy to find your way in this swarm of stars, but this atlas tries to make it as easy as possible. So now it is not just experienced amateurs that can enjoy looking at the heavens. Two additional observing aids are recommended. The first is a planisphere, where one can dial in the time and day in

order to see which constellations are visible and where they are in the sky. The second is an astronomical yearbook. It lists the current positions of the planets and all important phenomena. So, let us begin our journey around the night sky, and see what the universe can reveal to us! Facing page, top: The constellation Cygnus (Swan) in the midst of the northern Milky Way. The photograph gives an impression of the uncountable stars in our Milky Way. This becomes more conspicuous when you sweep through Cygnus with binoculars. Under a very dark sky, one can try to find the North America Nebula, Pelican Nebula, and Veil Nebula (see p. 47). These are difficult nebulae and are only barely visible on this photograph as well.

Astro-Imaging Projects for Amateur Astronomers

The Amateur Astronomer's Guide to Choosing, Buying, and Using Telescopes and Accessories

The Backyard Astronomer's Guide

Stars and Their Spectra

The ShortTube 80 Telescope

Binocular Stargazing

NightWatch

A reference guide for stargazers offers star charts and information on equipment, planets, and stellar photography.

The perfect gift for amateur and seasoned astronomers. Follow the progress of constellations throughout the seasons with this beautiful companion to the night sky from Astronomy experts Collins.

Discover Beautiful Nebulas, Constellations, Deep Sky Objects and More with Your Telescope David Dickinson, co-author of *The Universe Today Ultimate Guide to Viewing the Cosmos*, has created the ultimate field guide for backyard astronomers. Whether you want to impress viewers at a star party, or learn what you can see with your new telescope, David shows you how to find the most impressive views the night sky has to offer. Broken down by month and by hemisphere to ensure you get the best possible view, David shows you how to find objects like spiral galaxies, stunning sights in the Milky Way and stars that bring the "wow factor" to astronomy. With 44 sky charts and David's expertise, it's like having a pro-astronomer out in the field with you.

Choosing and Using the New CAT will supersede the author's successful Choosing and Using a Schmidt-Cassegrain Telescope, which has enjoyed enthusiastic support from the amateur astronomy community for the past seven years. Since the first book was published, a lot has changed in the technology of amateur astronomy. The sophistication and variety of the telescopes available to amateurs has increased dramatically. Computerized SCTs, Maksutov-Cassegrains, and most recently Meade's new and acclaimed Ritchey-Chrétien's have come to dominate the market. That means that all amateurs considering the purchase of a new telescope (not only a SCT, and not just beginners) will benefit from this detailed guide. Choosing the right telescope for particular kinds of observation (or even for general work) is far from easy - but Rod Mollise gives invaluable advice and guidance.

The Art of Astrophotography

The Story of the Stars, Planets, and Constellations--and How You Can Find Them in the Sky

A Practical and Scientific Approach to Deep Space Imaging

A Child's Introduction to the Night Sky (Revised and Updated)

The Backyard Astronomer's Field Guide

A Practical and Scientific Approach to Deep Sky Imaging

Astrophotography for the Amateur

Welcome to the first comprehensive guide to one of the world's most popular telescopes: the ShortTube 80 refractor. With its ultra-portability, versatility, and relatively low cost, this telescope continues to delight generations of stargazers. Starting in the field under a dark sky, the author walks the reader through a typical evening of stargazing, where the ShortTube 80 brings many astronomical treasures into focus. From there, he provides an in-depth account of the optical properties of the ShortTube 80 refractor and the accessories and mounting arrangements that maximize its potential both as a spotting 'scope by day and an astronomical 'scope by night. The main text discusses how the versatile ShortTube 80 can be used to study deep sky objects, the Sun, the Moon, bright planets and even high-resolution projects, where the instrument's features can be optimized for the observation of tight double and multiple stars. It explores how the ShortTube 80 can image targets using camera phones, DSLRs and dedicated astronomical CCD imagers. Packed with practical advice gained from years of firsthand stargazing experience, this book demonstrates exactly why ShortTube 80 has remained a firm favorite among amateur astronomers for over three decades, and why it is likely to remain popular for many years to come.

Commercially-made astronomical telescopes are better and less expensive than ever before, and their optical and mechanical performance can be superb. When a good-quality telescope fails to perform as well as it might, the reason is quite probably that it needs a little care and attention! Here is a complete guide for anyone who wants to understand more than just the basics of astronomical telescopes and accessories, and how to maintain them in the peak of condition. The latest on safely adjusting, cleaning, and maintaining your equipment is combined with thoroughly updated methods from the old masters. Here, too, are details of choosing new and used optics and accessories, along with enhancements you can make to extend their versatility and useful lifetime. This book is for you. Really. Looking after an astronomical telescope isn't only for the experts - although there are some things that only an expert should attempt - and every serious amateur astronomer will find invaluable information here, gleaned from Barlow Pepin's many years' experience working with optical instruments.

Provides information about the moon, star charts and monthly sky maps covering that which is visible each month in different hemispheres.

This book de-mystifies the jargon of webcams and computer processing, and provides detailed hints and tips for imaging the Sun, Moon and planets with a webcam. It demonstrates how inexpensive tools are revolutionizing imaging in amateur astronomy. Anyone with a modest telescope and a webcam can now obtain jaw-dropping lunar and planetary images to rival those taken with mid-range astronomical CCD cameras costing thousands of dollars. A glance through the images in this book shows just what spectacular results can be achieved by using a webcam with your telescope! Your scientific results will be sought by professional astronomers.

Basics for Beginners

Making Beautiful Deep-Sky Images

A Star-Hopper's Guide

Long Exposure Astrophotography

Getting Started

50 Things to See on the Moon

The Stars

The book that taught thousands of people about astrophotography has been completely revised and updated in this second edition. It covers everything you need to know to capture stunning images of deep-sky objects with a DSLR or CCD camera: The fundamental concepts of imaging and their impact on the final image How to pick a telescope and camera How to get set up and take the images Where and when to find the best objects in the night sky How to process images using Adobe Photoshop(R) and PixInsight(R) Start-to-finish examples of image processing Full-color with over 300 illustrations.

There are many books covering different facets of astrophotography, but few of them contain all the necessary steps for beginners in one accessible place.

Astrophotography is Easy! fills that void, serving as a guide to anybody interested in the subject but starting totally from scratch. Assuming no prior experience, the author runs through the basics for how to take astrophotos using just a camera—including cell phones and tablets—as well as a telescope and more sophisticated equipment. The book includes proven techniques, checklists, safety guidelines, troubleshooting tips, and more. Each chapter builds upon the last, allowing readers to master basic techniques before moving on to more challenging material. Also included is a comprehensive list of additional books and resources on a variety of topics so readers can continue expanding their skills. Astrophotography Is Easy! doesn't simply teach you the basic skills for becoming an astrophotographer: it provides you with the foundations you will need for a lifelong pursuit.

The Astrophotography Manual, Second Edition is for photographers ready to move beyond standard SLR cameras and editing software to create beautiful images of nebulae, galaxies, clusters, and the stars. Beginning with a brief astronomy primer, this book takes readers through the full astrophotography process, from choosing and using equipment to image capture, calibration, and processing. This combination of technical background and hands-on approach brings the science down to earth, with practical methods to ensure success. This second edition now includes: Over 170 pages of new content within 22 new chapters, with 600 full-color illustrations. Covers a wide range of hardware, including mobile devices, remote control and new technologies. Further insights into leading software, including automation, Sequence Generator Pro and PixInsight Ground-breaking practical chapters on hardware and software as well as alternative astrophotography pursuits Discusses the practical aspects of stargazing, including how to choose appropriate equipment, contending with light pollution, taking successful photographs of galaxies and nebulae, and selecting an observing site.

An Introduction to the Spectral Sequence

The Astrophotography Manual

How Two Great Minds Battled Quantum Randomness to Create a Unified Theory of Physics

Biographical Encyclopedia of Astronomers

Astrophotography is Easy!

A first-time stargazer's guide

This is the must-have guide for all amateur astronomers who double as makers, doers, tinkerers, problem-solvers, and inventors. In a world where an amateur astronomy habit can easily run into the many thousands of dollars, it is still possible for practitioners to get high-quality results and equipment on a budget by utilizing DIY techniques. Surprisingly, it's not that hard to modify existing equipment to get new and improved usability from older or outdated technology, creating an end result that can outshine the pricey higher-end tools. All it takes is some elbow grease, a creative and open mind and the help of Chung's hard-won knowledge on building and modifying telescopes and cameras. With this book, it is possible for readers to improve their craft, making their equipment more user friendly. The tools are at hand, and the advice on how to do it is here. Readers will discover a comprehensive presentation of astronomical projects that any amateur on any budget can replicate – projects that utilize leading edge technology and techniques sure to invigorate the experts and elevate the less experienced. As the "maker" community continues to expand, it has wonderful things to offer amateur astronomers with a willingness to get their hands dirty. Tweaking observing and imaging equipment so that it serves a custom purpose can take your observing options to the next level, while being fun to boot.

A simple guide to the location and recognition of stars and constellations, mainly in the northern latitudes

A guide to viewing stars, the moon, planets, meteors, comets, and aurora through binoculars. Features a foreword by renowned astronomer and writer David Levy. Includes a complete guide to current binocular brands and models and explains what to look for in each season.