30 Popular Astronomy Book Recommendations

by Joel Dick Royal Astronomical Society of Canada Recreational Astronomy Night September 16, 2020

Introduction

https://facebook.com/groups/seriousnonfiction/

Target audience: beginners and amateurs

Focus on history, biography, basic science

 I'll stay away from specialized books, technical guides on astrophotography, and sky atlases (though I've included a couple)

Rated by accessibility and engaging writing style

And now, for a tour of my bookshelf...

Fiction

The Martian by Andy Weir

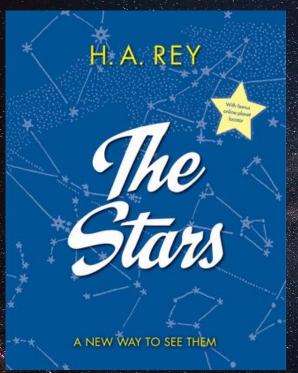
THE MARTIAN ANDY WEIR

Attention to technical accuracy Spark an interested in science in kids Available in "censored" version Excellent film as well •

A NOVEL

Observing

The Stars: A New Way to See Them by H. A. Rey



Fun illustrations by the author of Curious George Good introduction to the constellations and seasons Also includes a good explanation of how the sky works

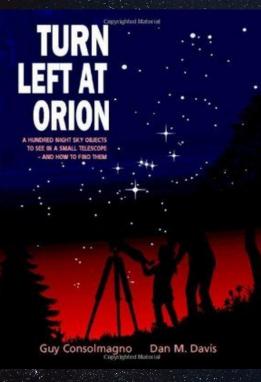
NightWatch by Terence Dickinson



TERENCE DICKINSON Revised Fourth Edition: Updated for Use Through 2025

Comprehensive guide to beginning observing, covering the basics, from equipment, viewing techniques, objects to look for, to photography Spiral bound so you can take it into the field

Turn Left at Orion by Guy Consolmagno



 Very practical reference of objects to look for and how to find them
 Organized by each season
 Also spiral bound

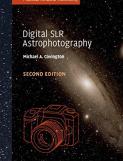
Observer's Handbook by RASC

OBSERVER'S HANDBOOK 2020 Very detailed and comprehensive reference
 Not designed for beginners to read from beginning to end

EDITOR: JAMES S. EDGAR THE ROYAL ASTRONOMICAL SOCIETY OF CANADA

Books on astrophotography





THE ASTROPHOTOGRAPHY MANUAL APRACTICAL AND SCENTIFIC APPROACH TO DEEPSKY MAKING

2

CHRIS WOODHOUSE

50 Amazing Things To See With Your New Telescope

Allan Ha

Technical guides to astrophotography Ideas for things in the sky to find and photograph Harder to find at discount Often most of the information is available online

General History

A Short History of Nearly Everything by Bill Bryson

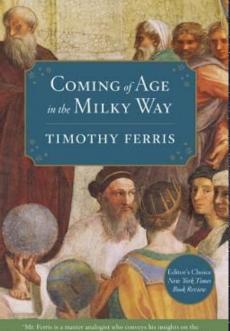


BILL BRYSON

"A Short History of Nearly Everything

Covers the history of astronomy, but geology, paleontology, chemistry, physics, biology, focusing on the Victorian age Science is surprisingly accurate for a journalist Laugh-out-loud funny

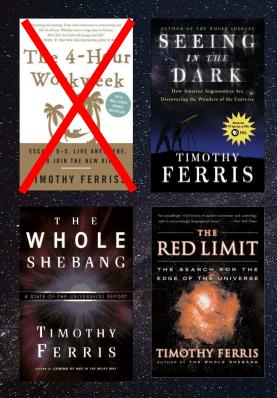
Coming of Age in the Milky Way by Timothy Ferris



"Mr. Ferris is a matter analogist who conveys his insultits on the istory of cosmology with a brival flair. This trek through cosmology's archives is a splendial one indeed." — New Sort Time that Review One of the best books on the history of mankind's understanding of their place in the universe, from ancient times to Hubble and beyond

 A few decades old, but still holds up

Other books by Timothy Ferris



Not that Timothy Ferriss The Whole Shebang Seeing in the Dark The Red Limit Seeing in the Dark is a fun book about amateur astronomers Somewhat out-of-date, but still excellent histories

Big Bang by Simon Singh

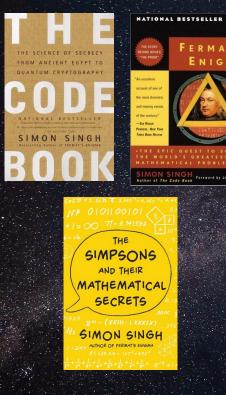
BIG BANG

The Origin of the Universe

Constituted Material

SIMON SINGH Hest-selling author of The Code Book and Fermat's Enterna Copyrates Meters Comparable to Timothy Ferris, but probably a little more approachable
 Also focuses on the Twentieth Century

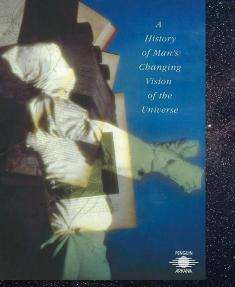
Other books by Simon Singh



The Code Book Fermat's Enigma The Simpsons and Their **Mathematical Secrets** Also appeared on the Numberphile channel a few times: https://www.youtube.com/ watch?v=qiNcEguuFSA

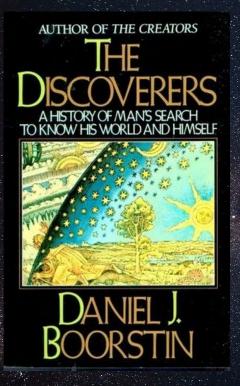
The Sleepwalkers by Arthur Koestler

ARTHUR KOESTLER The SLEEPWALKERS



1959 classic by the great novelist Covers the period from ancient times to Newton Focuses on the great men like Galileo, Tycho Brahe, and Kepler

The Discoverers by Daniel J. Boorstin



Published in 1983 Focuses on the transition from mediaeval to modern times Not exclusively about astronomy - discusses economics and biology as well

Tour of the Universe

Cosmos by Carl Sagan



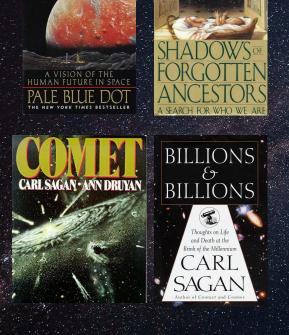
Classic tour of the universe and man's place inside it Also a classic TV series Contemplative at times, but inspired many over the decades since its release

Other books by Carl Sagan

CARL SAGAN

ANN DRUVAN

CARL SAGAN



Pale Blue Dot
Shadows of Forgotten Ancestors
Comet
Billions and Billions

Astrophysics for People in a Hurry by Neil deGrasse Tyson

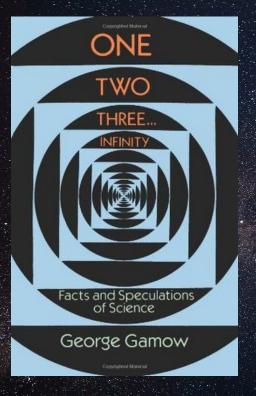
#1 New York Times Bestseller

NEIL de GRASSE TYSON

ASTROPHYSICS for PEOPLE in a HURRY In the style of Carl Sagan's Cosmos
Fairly short, quick read
3:41 audiobook on YouTube

Relativity, The Big Bang, and Theory of Everything

One Two Three... Infinity by George Gamow



Makes concepts like Minkowski space, Brownian motion, Brownian motion, and CNO cycle almost stupidly simple Written with wit and charm

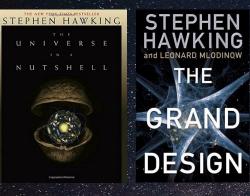
A Brief History of Time by Stephen Hawking

TED BRIEF HISTORY OF TIME STEPHEN

Seems a little dated and superseded by others, but still retains its classic status

 Covers several topics fairly well, like "no-hair theorem" and Hawking radiation (obviously)

Other books by Stephen Hawking





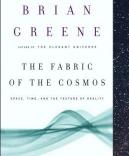
BLACK HOL

UNIVERSES

The Universe in a Nutshell
The Grand Design
Black Holes and Baby Universes

Books by Brian Greene

NATIONAL BESTSELLER The Elegant Universe Superstrings, Hidden Dimensions, and the Quest for the Ultimate Theory Brian Greene with a new preface and epilogue



BBIAN GREENE THE HIDDEN REALITY

BRIAN GREENE uthor of The Elegant Univers UNTIL THEEND **OF TIME**

Mind, Matter, and Our Search for Meaning in an Evolving Universe

The Elegant Universe The Fabric of the Cosmos The Hidden Reality Until the End of Time

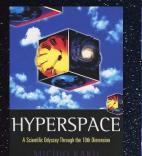
Books by Sean Carroll

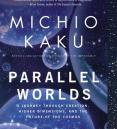




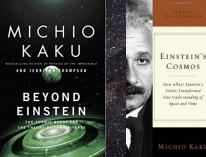
From Eternity to Here
The Particle at the End of the Universe
The Big Picture
Something Deeply Hidden

Books by Michio Kaku





Space and Time



Hyperspace` Parallel Worlds **Beyond Einstein** Einstein's Cosmos

More books on Cosmology





Max Tegmark

Our Mathematical Universe

My Quest for the Ultimate Nature of Reality

STEVEN WEINBERG

Winner of the 1979 Nobel Prize for Physic

A Modern View of the Origin of the Universe

MARTIN REES JUST SIX NUMBERS

at Shape the Universi

A leading scientist interver evolution, theoretic hysics, and computer science to offer new understanding . reality

fature of theoretical physics," -AMERICAN THREE

ROADS

QUANTUM

GRAVITY

LEE SMOLIN

THE FABRIC **OF REALITY**

DAVID DEUTSC Winner of the Paul Dirac Medal and Prize

Kip Thorne Steven Weinberg Lee Smolin Max Tegmark Martin Rees . **David Deutsch**

Origins of Life and Exoplanets

Rare Earth by by Peter D. Ward



Why Complex Life Is Uncommon in the Universe

PETER D. WARD DONALD BROWNLEE

Life on other planets Recommended to me by lan Shelton for his course Life on Other Worlds Course textbook was Life in the Universe by **Bennett and Shostak**

The Universe Within by Neil Shubin

THE UNIVERSE WITHIN

DISCOVERING THE COMMON HISTORY OF ROCKS, PLANETS, AND PEOPLE



NEIL SHUBIN

AUTHOR OF YOUR INNER FISH

Author of Your Inner Fish, paleontologist who discovered Tiktaalik Stories from the field Cosmic origins of life on earth Writing style is a bit

simple

History and Biography

Longitude by Dava Sobel

Longitude

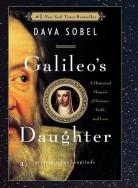
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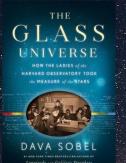
The True Story of a Lone Genius Who Solved the Greatest Scientific Problem of His Time



Gripping story by outstanding science. writer Also an excellent TV miniseries from A&E (available on Amazon Prime)

Other books by Dava Sobel

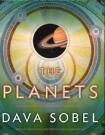




A More PERFECT HEAVEN

Dava Sobel

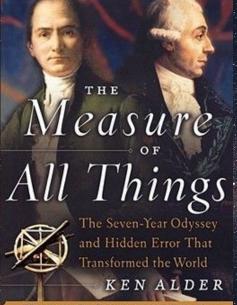
HOW COPERNICUS LUTIONIZED THE COSMOS



The New York Times Bestelling Author of Son LONGITUDE and GALILEO'S DAUGHTER

Galileo's Daughter
The Glass Universe
A More Perfect Heaven
The Planets

The measure of All Things by Ken Alder



"These are enthralling, fascinating, even mind-altering pages. Alder imbues the narrative with a tremulous, fever-soaked climax and a lengthy and satisfying denouement." — The Boston Globe Story of Jean Baptiste Joseph Delambre and Pierre Méchain's effort to measure the meridian

For the Love of Physics by Walter Lewin

"For the Look of Physics captures Walter Lewin's extraordinary intellect, passion for physics, and brilliance as a teacher. Hopefully, this book will bring even more people into the orbit of this extraordinary educator and scientist."—Bill Gates

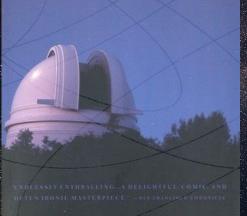
From the End of the Rainbow to the Edge of Time—A Journey Through the Wonders of Physics

Walter Lewin

Full of stories from Lewin's colorful career discovering new x-ray sources using balloons Personal reflections captures his passion for science and art

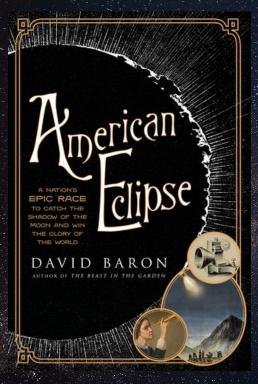
Lonely Hearts of the Cosmos by Dennis Overbye

Lonely Hearts of the Cosmos The story of the scientific quest for The secret of the universe DENNIS OVERBYE Author of Emission in Long



Story of Alan Sandage and the Palomar Observatory and the search for the age of the universe Narrative style, similar to James Gleick

American Eclipse by David Baron



Released just in time for the 2017 eclipse. Story of Thomas Edison and others' adventure to the Wild West to observe the 1878 total solar eclipse

The Hunt for Vulcan by Thomas Levenson

... And How Albert Einstein Destroyed a Planet, Discovered Relativity, and Deciphered the Universe

THOMAS

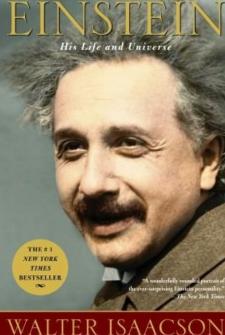
EVENSON

Hunt for

The

Story of Le Verrier's hypothesized planet Vulcan and its ultimate downfall

Einstein by Walter Isaacson



Great biography of Einstein's life - really gets inside his mind and personality Features the stories of the 1914 and 1919 eclipses

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