

Resources

Books

It's impossible to know how many astronomy books have been published but dozens of new tomes are released monthly. Online shops often allow you browse a few pages. Reviews are worth reading before parting with your hard earned cash. Some are at astronomynow.com/category/book-reviews/ (even more at www.astronomynow.com/books/index.html) and www.astronomytoday.com/reviews.html — check your local library too and use their online catalogue in case a book is on the shelf of another branch.

- Beginners guides can be a mixed bag but two worth picking up are *A Little Course in Astronomy* published by Dorling Kindersley and *Astronomy: A Self Teaching Guide* by Dinah Moché. The latter book is highly recommended.
- *Turn Left at Orion* by Br Guy Consolmagno and Dan Davis is rightly a classic. The book tells you how to use a telescope and has a selection of objects you can observe. The beauty of TLAO is that it describes what you really see in your instrument and why those views don't match the glossy photos that grace books and magazines.
- *The Backyard Astronomer's Guide* by Terence Dickinson and Alan Dyer has lots of advice for amateur astronomers. See www.backyardastronomy.com
- Star atlases come in a variety of sizes and level of detail. A great basic atlas is the diminutive Collins GEM "Stars". It's pocket-sized but packs in a lot. *Sky & Telescope* magazine produce *The Pocket Sky Atlas* which is great for binocular users.
- A planisphere (produced by Philips) and Moon chart (one by Sky & Telescope or that by Philips) will complement your star atlas. Philips also produce a nice line of pocket sized guides such as *Star Gazing with Binoculars*, *The Moon Observer's Guide*, and *The Solar System Observer's Guide*.
- *Universe* by Roger Freedman and *Astronomy Today* by Eric Chaisson and Steve McMillan are more expensive college-level text books but are very visual and go into significant depth on the current state of astronomical knowledge. Updated regularly.
- *Seeing in The Dark* by Timothy Ferris is part-autobiographical and part-paeon as to why we are amateur astronomers. Out of print but pick it up second-hand online.

Magazines

Libraries sometimes offer digital editions of some astronomy and general science magazines - e.g., see www.librariesireland.ie/online-resources for more information.

- astronomynow.com — UK based astronomy magazine with varied articles
- www.skyatnightmagazine.com — UK-based and a good choice for beginners
- www.astronomy.com — US-based magazine with a good mix of articles
- www.skyandtelescope.com — *Sky & Telescope* has been around since 1941
- www.astronomy.ie – astronomy and space articles with a local flavour

Apps

A wide variety of useful astronomy apps are available for mobile devices.

- *Sky Guide* (iOS) is a very realistic planetarium app while *Stellarium*, *Star Walk*, and *Solar Walk* are all available for both Android and iOS.
- *Gas Giants* (iOS) plots the moons of Jupiter and outer planets. The Android store equivalent is *Moons of Jupiter* and *Moons of Saturn*.
- *Moon Map (Pro)* and *Moon Globe* offer detailed charts of the Moon. *Moon Atlas 3D* and *LunarMap (Lite)* are the Android equivalents.
- Catch the space station or other satellite passes with *Heavens-Above* or *ISS Detector* (both Android). *ISSspotter* is available for iOS.
- *Aurora-Hunters UK* (Android) sends aurora alerts. *AuroraWatch UK* is for iOS..

Podcasts and radio

A number of radio shows and podcasts are worth checking out now and again.

- The *Astronomy Show* broadcasts weekly on Dublin City FM. More information at www.dublincityfm.ie/programmes/special-interest/astronomy-show
- Search for AstronomyFM on TuneIn Radio or similar radio player app
- The Planetary Society podcast at planetary.org/multimedia/planetary-radio
- stargazersonline.org is a great online 1- and 5-minute topical astronomy show
- *Star Talk Radio* (www.startalkradio.net) or *The Infinite Monkey Cage* are well known shows (www.bbc.co.uk/programmes/b00snr0w/episodes/downloads)
- Other podcasts such as *Guardian Science Weekly*, *BBC Discovery*, or *In Our Time* (hosted by Melvyn Bragg), often feature material on astronomy.

10 ideas on how to get started

1. Read books, magazines, sites/forums
2. Attend lectures; TV/DVD documentaries; listen to podcasts; install astro software
3. Join a club - talk to others at events/star parties/meetups
4. Don't be afraid to ask questions – all of us had to start somewhere
5. Find your way around the sky - casual viewing; take pictures; keep a log
6. Get some gear – binoculars, planisphere, star charts, and a Moon atlas
7. Dive in deep when buying a telescope – the right one will last a lifetime
8. Armchair; backdoor; casual; or advanced observing - find a level you enjoy
9. Do an online course - many are free
10. Try Citizen Science or specialisations – collaborations; use online remote scopes

Useful web sites

Sky information

- www.skymaps.com - superb charts you can download
- earthsky.org/astronomy-essentials - absolutely essential reading for what's up
- www.jb.man.ac.uk/astronomy/nightsky
- www.calsky.com - generates a bewildering array of tabular astronomical data

News and spaceflight

- www.heavens-above.com - space station predictions
- en.wikipedia.org/wiki/2019_in_spaceflight
- spaceflightnow.com and www.astronomynow.com — from *Astronomy Now*
- www.space.com - space news and infographics by Karl Tate
- www.universetoday.com - more astronomy and space news

The Sun, aurora, and eclipses

- www.spaceweather.com – transitory events as well as aurora alerts
- solarham.net — very detailed site about space weather
- aurorawatch.lancs.ac.uk — sign up for aurora alerts
- eclipse.gsfc.nasa.gov/eclipse.html — solar and lunar eclipses
- samuelastronomy.wordpress.com — solar observing by Samuel Bleyen
- www.atoptics.co.uk — the world of atmospheric optics

The Moon

- www.timeanddate.com — rise and set times along with phases
- solarsystem.nasa.gov/planets/moon — lots of info and images
- the-moon.wikispaces.com — huge resource about lunar features and more
- home.hiwaay.net/~krcool/Astro/moon — Moon facts, lore, and more
- www.popastro.com/moonwatch/moon_guide/about.php — lunar observing

The Planets

- solarviews.com — multimedia tour of the solar system
- mvas-ny.org/HowObsPlanets.htm — observing the planets

Comets and meteors

- www.imo.net — the International Meteor Organisation
- www.cometwatch.co.uk — upcoming comets visible from here
- www.ast.cam.ac.uk/~jds — British Astronomical Association comet section

Learning astronomy and outreach

- www.skyandtelescope.com/astronomy-information/ — how to get started
- www.unawe.org — Universe Awareness promotes astronomy education
- www.astrosociety.org — world's premier astronomy education group
- todayinsci.com — interesting read about science history each day of the year

Telescopes and astrophotography

- www.calgary.rasc.ca/downloads/ — buying a telescope or binoculars
- binocularsky.com — lots of info about binoculars and a monthly newsletter
- www.astropix.com — guide to photographing the night sky
- www.astrobuysell.com — UK-based site for buying and selling used stuff
- www.ktctelescopes.ie — telescope & equipment supplier in Ireland

Miscellaneous

- www.ianridpath.com/startales/contents.htm — lore about the constellations
- stars.astro.illinois.edu/sow/sowlist.html — info about the brightest stars
- www.itelescope.net — use a remote telescope to take amazing sky photos
- www.twanight.org — features the work of international astrophotographers
- www.carrowkeel.com/files/main.html — megalithic sites in Ireland

Blogs and forums

- astrobob.areavoices.com
- www.planetary.org/blogs
- scienceblogs.com/startswithabang
- www.cloudynights.com - has very active sub-forums with a global audience
- www.irishastronomy.org or www.boards.ie/vbulletin/forumdisplay.php?f=267
- stargazerslounge.com - active UK-based astronomy forum