Telescope buying advice by Greg Sanders - written 13/12/2018 00:53:55

Thinking of getting a telescope?

Firstly, you might be better to start with binoculars, they are much cheaper and more portable, will give you a chance you take your first steps and most astronomers still keep a pair for quick viewing. Don't be tempted with anything more powerful than 10x50 you will never be able to hold them steady enough without a tripod (or upturned broom). Don't buy the cheapest, I had a pair for about £20, they were crap. Bought an Olympus DPS-1 10x50 pair for about £56, excellent. Used them a few days ago to locate a comet to image it, they always are to hand and go where ever my telescope does.

Some of those little "table top" telescopes can actually be very good and easily portable, where as a monster will be too much trouble to bother with, read the scopreviews below and take a look at the beginner scopes on offer. Please avoid the "supermarket" scopes buy only from specialist suppliers.

The best advice is always to try a few and ask around before you buy, pop along to any of our 2nd Tuesday meetings at Degibna, we will be more than happy to demonstrate them for you.

There is some good advice here (though it is a bit out of date now) http://www.scopereviews.com/begin.html

For a PC/Mac get yourself a program called stellarium, it is totally free for these and gives you a real time planetarium that can be used to learn the constellations etc. you can also get it (or similar ) for a tablet or mobile phone, many of these are free too. https://stellarium.org/

For an example of "beginner telescopes" try here https://www.firstlightoptics.com/beginner-telescopes.html

Check out the customer reviews to get an idea of what to expect.

Also spare a thought for how you will use a telescope (do you have a "dark" sky at home, can you see the Milky Way?, will you need to travel to a dark sky site?), does it need to be light and portable?, stow away in a box when not in use?, what are you most interested in observing? (some telescopes are better for planetary/moon imaging, others are better for "deep sky" objects like galaxies and nebulae.

Manage your expectations, even a massive reflector will not show you any of the colours of nebulae you see in pictures, these "colours" are very weak and can only be "seen" after a long exposure through a camera. You will see colours on planets, and on some stars too. One of our guys (Fred Deakin) has produced some images that are almost as good as the Hubble Space telescope, but this is after many years of trial and error and a very significant investment.

If your end goal is astrophotography? this will also influence your choice.

The Sky at Night or Astronomy Now magazines will give you an idea of what is out there (equipment and observable objects) and many links to telescope specialist shops.

The good thing is that you don't actually need a huge financial outlay to get started, in fact it's often better to start small and simple, than jump in feet first with a monster you'll never be able to use.

That should give you plenty to look into and think about.

Whatever you decide to purchase we are happy to offer help and advice in it's use and set up.

Don't forget to dress warmly, it can take up to 30 minutes to get your full dark adapted vision (with no exposure to white lights-use red instead), when looking don't just have a quick peek, take time to study the object and let you brain do some image processing to eek out the details.

Use "averted vision", try looking at the Andromeda galaxy with your dark adapted eyes, look straight at it and it will disappear, look slightly away from it and you will see a fuzzy oval. The centre of your vision is more sensitive to movement than light (do this looking through telescopes too).

It takes a bit of practice.

Astronomy can be a very interesting and rewarding hobby.

Greg.