The November meeting is always the first of the winter season for CADAS and we were greeted by clear skies and the first really cold night since the spring. Pete Adshead has been working to restore a telescope gifted to the society and he was able to show it at work in the field. It's a 120mm refractor so definitely not a small 'scope. We hope to make it available for loan to members once Pete has finished work on the mount.

For those of us who prefer the relative warmth of the inside of the hall we were pleased to welcome Heather Johnston of Exeter University who spoke about the formation of giant planets around stars other than our sun. Heather gave us a quick recap of the processes that lead to planetary formation (which her colleague Joe Williams had covered at our August meeting) and moved on to the main course of what mitigates towards the formation of giant planets around stars and what they do after formation.

The Solar System's giant planet (Jupiter) has been so instrumental in shaping the history of all the other planets that it would be easy to assume that most solar systems have giant planets. In addition, a significant number of those discovered early on in the search for exoplanets were "hot Jupiters" but this turns out to be a selection effect as they're much easier to discover than smaller planets. Looking at representative samples of stars and their systems, though, it turns out that giant planets are relatively rare.

Based on modelling work and observational samples there is a clear peak in the formation of giant planets at around 1.7 solar masses with the rate falling off to zero for stars of greater than 2.5 solar masses. Heather explained how the various processes in early circumstellar disks can create these giant planets and – just as importantly - why they don't form in larger, brighter, stars.

At the end she looked at her current area of study which moves away from looking at solar systems as isolated entities and examines how external stars can affect the formation of solar systems by radiative evaporation (like in the famous Towers of Creation or in binary star systems). It looks like there's lots more interesting work do in this area!

After the break (for a nice warming cup of tea for those who had braved the cold for a look through the telescope) Terry ran through his usual Upcoming Events (see below) and Gordon and Ian had some images to show. Gordon showed excellent images of M83 and M31 taken from Chile and Utah respectively while Ian's were a bit closer to home of Comet Lemmon and the moon through a simple DSLR and a camera phone. Terry finished off the evening with some images of Comet Lemmon and some other deep-sky objects taken with his new-ish Seestar S30 and a few from the remote telescopes in Moorook, Australia.

Next month's meeting is the annual Christmas Social. Bring a small plate of food to share, either savoury or sweet, which we'll have after a number of short talks and a look at the prospects for 2026. We look forward to seeing you there on 17th December.

Upcoming Events

Planets

Mercury becomes visible in the morning civil twilight pretty much throughout December (better at the start). It will be low in the ENE from about 7am.

Venus will just be visible in the morning twilight for the next few days but is getting too close to the sun after that. Conjunction with the sun on 6th January (2026!)

Mars is too close to the sun and it too gets to conjunction on 9th January.

With the change back to GMT, Jupiter now rises at around 20:00GMT and dominates the night time eastern sky. It's below Castor and Pollux and moving slowly westward (retrograde) from night to night. Opposition is on 10th January.

Saturn is still fairly bright below Pegasus. It's very much the brightest object in that part of the sky. The rings are still now pretty much at their thinnest! It will reach its "stationary point" at the end of November and start moving eastwards again from night to night

Uranus is just below the Pleiades in the morning sky. It should be visible in binoculars.

Neptune is only visible in a telescope. It's not far from Saturn (about 4 degrees and closing after the end of the month).

Comet C/2025 R2 SWAN has faded considerably from its peak in mid October and will be quite difficult from now on. It is, however, very favourably placed in Pisces.

Comet C/2025 A6 Lemmon was a great sight at the end of October but is now too close to the sun for observation as it sets at the end of Nautical Twilight. It continues to track south (making it worse for us!)

Comet 2025 K1 ATLAS has hit the news and is currently just below the bowl of the Plough (but moving rapidly from night to night). It has broken up into at least three pieces and will be nearest Earth on 24th November. Only at around magnitude 10, though, so a big telescope object.

Comet 3/I ATLAS is well placed in the morning sky in Virgo but is very faint (fainter than Pluto!)

Upcoming Meetings

Dec 17 Arthur Davis lecture, member short talks and Christmas Social
2026
Jan 21 Bud Budzynski *Albert Einstein*
Feb 18 Brian Fraser *Exploration of Mars*
Mar 18 John Stapleton *Amateur Astronomy: Why do we do it?*
Apr 15 David Strange *Norman Lockyer*
May 20 Ask the Panel

Events

Tintinhull Youth Club Tuesday 25th November 18:30-20:00

Manor Court Friday 23rd January 2026

Redstart School Thursday 29th January 2026

2026 Programme

2026

Jan 21

Feb 18

Mar 18 John Stapleton Amateur Astronomy: Why do we do it?

Apr 15 David Strange Norman Lockyer

May 20 Ask the Panel

Jun 17

Jul 22

Aug 19 Mark Hardaker Astronomical Planning and Recording - How to Get the Most Out of your Hobby

Sep 16 Gadgets and Gizmos Evening followed by Observing Session

Oct 21

Nov 18

Dec 16 Christmas Social and members' short talks

CADAS meetings start at 7:30pm and last about 2 hours including a break for tea/coffee and cake. We meet at the Village Hall in Norton-sub-Hamdon, TA14 6SF. See http://www.cadas.net/ for further details.