Lewes Astronomical Society

Newsletter
July 2026

LAS Newsletter: July 2026

Editor: Chris Taylor

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1 Introduction

Welcome to the July 2026 issue of the LAS Newsletter, and thanks to all the members who have contributed to this issue in various ways.

2 Recent LAS events

2.1 Subud Centre meeting (3rd June)

This was the last regular monthly Subud Centre meeting before the summer break. It began with the Annual General Meeting (AGM), followed by a detailed talk by Tony Gwyther on the theoretical prediction and experimental detection of neutrinos, and why they are of interest in astronomy and cosmology (see the June 2026 Newsletter for further details).

In the AGM, Membership Secretary Judith Pyett reported that membership had risen from 9 at the end of the Covid pandemic to 165 now (plus hundreds of non-member supporters on the LAS emailing list). Changes to the LAS Committee were reported and approved (for the current committee, see https://www.lewesas.org.uk/committee). Outgoing Committee member Kate Land was thanked for her huge contributions to the LAS (especially in outreach, including the Lewes Space Day in March, which she organized).

Treasurer Catherine Jackson gave a detailed breakdown on LAS income and expenditure, reassuring LAS members that, to mix metaphors, LAS finances are under the watchful eye of a safe pair of hands. A pie chart by Kate Land showed the relative shares of various types of expenditure. An increase to the annual membership fee from £15 to £18 was approved by a vote of LAS members present. The fee had been held at £15 for several years, despite increasing costs, and the £18 fee still comes with a complimentary copy of Nigel Henbest's excellent yearly Stargazing guide (for details on LAS membership and its benefits, and how to apply, see https://www.lewesas.org.uk/membership). The extra income from the new fee will enable travelling expenses for LAS meeting speakers to cover a wider geographical area, thus extending the pool of potential speakers.

2.2 Southover Primary School summer fair (20th June)

Committee members Kate, Carina, Jason, and Chris attended this afternoon summer fair in the grounds of Southover Primary School in Southover High Street, Lewes (across the road from the beautiful Southover Grange Gardens, and near the lower end of the steep, cobbled Keere Street). The committee members staffed an LAS gazebo stand, chatted to passers-by, and invited them to view the Sun safely through the LAS hydrogen-alpha solar telescope.

2.3 Summer Solstice walk, Lewes (21st June)

The LAS Summer Solstice walk in Lewes, up Malling Hill via the Malling Hill Nature Reserve, took place on a very warm evening with fine weather. This is a free event open to all, which has become a popular LAS tradition. The participants met in the Phoenix Causeway Car Park, and walked by the river before crossing fields to start the ascent up Malling Hill.

Sunset was due at about 9.20pm, with the Sun setting roughly in the north-west, and twilight lasted until just after 10pm, helping to make the descent a bit easier. This event came too late for the LAS image gallery at the end of this issue, but at least one photo of it may appear in the August 2026 Newsletter, and others on the LAS Facebook page or LAS Instagram feed.

3 Upcoming LAS events

See https://www.lewesas.org.uk/events for details and updates on upcoming LAS events (weather-dependent events may be cancelled).

3.1 Harvey's Brewery visit (1st July)

A visit to Harvey's Brewery in Lewes, including a guided tour and a chance to taste some of their beers, which has become a popular annual LAS event. It is a ticketed social event for adults, with discounted prices of £12 for members and £15 for non-members accompanying members (for more details, see the LAS events page link above).

3.2 Partial solar eclipse (12th August)

On this day, a solar eclipse will occur. From the Lewes area, the eclipse will be partial, but with more than 90% of the Sun's disk covered at the peak, at about 19:13 BST (roughly an hour and a quarter before local sunset at 20:27 BST), when the Sun will still be about 10 degrees above the western horizon. The LAS are planning an eclipse observation event, probably at Seaford seafront, which has an unobstructed western horizon (details to be confirmed later).

As always, it should be emphasized that trying to observe the Sun without the proper equipment is *extremely dangerous, and can easily cause serious permanent eye damage, including irreversible blindness*; the LAS will be using a hydrogen-alpha solar telescope and handing out special solar-eclipse viewing glasses. For a thorough description of this eclipse, including safe viewing methods, see Iain Todd's article on the BBC Sky at Night website.

Some LAS members are doing private trips to see the eclipse from inside the path of totality, which extends from parts of Greenland and Iceland across

the Atlantic into Spain, crossing from the north coast to the east coast. We wish them good luck with the weather, and hope that they see totality, which is a stunning and unforgettable experience.

3.3 Perseids meteor shower (12th/13th August)

Only a few hours after the eclipse is the peak of the Perseids meteor shower, best seen in dark skies well after sunset (see this link for observing tips). The LAS Committee are considering an event to observe these meteors, but details are not yet finalized or confirmed; watch for further updates to the LAS emailing list or WhatsApp feed.

4 This month's topic links

This section lists a small selection of interesting links from various sources.

4.1 Links from the WhatsApp feed

The LAS WhatsApp feed has become the collective hive mind of the LAS, a bit like "the Borg" in the fictional Star Trek universe (motto: "Resistance is futile."), although not in a bad way. Like a huge parallel-processing array, LAS members post many more interesting images and links to articles, podcasts, and videos than any individual could hope to match. The following is just a small sample (posters of the links credited in brackets):

- New Glenn rocket explosion (Chris K.): from Scott Manley's YouTube channel on rocket science; a serious setback for Blue Origin.
- Rideable "binoscope" (Michael): hilarious bespoke, trailer-mounted two-seater contraption; would be great to have one for LAS outreach!
- Threat to ozone from satellite mega-constellations (Paul W.): from Anton Petrov's YouTube channel on STEM topics.
- Impact of Amazon satellites on astronomy (Gerard F.): article from Sky and Telescope magazine.
- "Protecting Our Dark Skies" (Robert M.): episode of the Supermassive podcast.
- "Lost in the Glow" (Dan T.): beautiful time-lapse video showing the Milky Way at Cuckmere Haven.

If you're an LAS member but not on the WhatsApp feed, consider giving it a try. If you're wary of social media, be assured that (thanks to Steve Ward) this is a well-moderated, on-topic feed, almost ad-free (just occasional ads from members offering equipment, for the accuracy of which the LAS bears no

responsibility). Thanks also to Judith Pyett for keeping track of who should be on the feed, not a trivial task when there are 165 members and hundreds of non-member supporters.

If you're a non-member who's reading this Newsletter after downloading it from the "Resources" tab at https://www.lewesas.org.uk/, the LAS WhatsApp feed is one of several attractive benefits that are available only to members. Apart from external links, members post a huge variety of interesting images, such as the small sample in the image gallery in section 7. To see images and externally linked videos or articles at their best, install WhatsApp not just on a smartphone, but on a large-screen device as well.

4.2 Other links

Thanks to Richard Butchers for an interesting 1st April LAS talk at the Subud Centre on Wernher von Braun, the controversial German engineer who helped to develop the V2 rockets used in World War 2, and who later played a key role in the American space program. The following two links relate to that:

- Short musical sketch on von Braun: by satirist Tom Lehrer.
- Von Braun film: from the YouTube channel Classic Aerospace History.

5 Monthly person: James Bradley (1693–1762)

The English astronomer **James Bradley** was born in March 1693 and died on 13th July 1762 (see this online biography). Like several 18th-century astronomers, he tried to measure *stellar parallax* (a change in observed position of nearby stars relative to distant ones, caused by a shift in perspective as the Earth orbits the Sun; analogous to how a person's finger at arm's length shifts against the background, as seen by the left eye and right eye separately).

In trying to measure parallax, Bradley discovered *stellar aberration*, a different type of shift in observed stellar positions, resulting from light having a finite speed (the magnitude of which he was then able to estimate).

A second great discovery of Bradley's, deduced from later very accurate stellar position data over several years, was *nutation*, a small and irregular nodding motion of the Earth's axis, caused by the varying direction and strength of the gravitational force of the Moon upon the Earth.

Bradley became the third Astronomer Royal at the Royal Observatory Greenwich in 1742, and then worked there in a scientific, administrative, or advisory capacity for the rest of his life. For a roughly 20-minute audio biography of Bradley's life and work, listen to Chapter 9 from the free online LibriVox audio recording of the book Great Astronomers by Robert Stawell Ball (1840–1913).

6 The night sky in July 2026

Thanks as always to Paul Whitmarsh for the lookahead guide, and to Sarah Carson for the star chart.

6.1 Lookahead guide

The chart in section 6.2 shows how the night sky will appear at midnight at the start of July, 11pm in mid-month, and 10pm at the end of July. The position and phase of the Moon are shown for the 20th, 25th, and 28th. Venus will shine brightly after sunset in the west throughout the month, while Saturn and Mars rise in the early morning.

The July map shows the Milky Way rising out of the south, the view we see of our Galaxy from the inside, with the constellations of Scorpius and Sagittarius low on the horizon. In this part of the sky lies the heart of our Galaxy, home to a supermassive black hole. Above these constellations is Ophiuchus, the Serpent Bearer. Even through binoculars the Milky Way resolves into many thousands of stars, a hint of the immensity of the Galaxy we live in.

The most recent visible supernova in the Milky Way occurred in Ophiuchus in 1604. Known as Kepler's Supernova, the dying star was nearly as bright as Venus appears this month and must have been a spectacular sight.

Astronomers believe we are overdue to see another supernova in the Milky Way. Massive stars end their lives in spectacular explosions that can briefly outshine the entire Galaxy. However, if such a star lies on the far side of the Milky Way, the light can be completely blocked by dust. For this reason, several supernovae may have occurred without ever being visible from Earth.

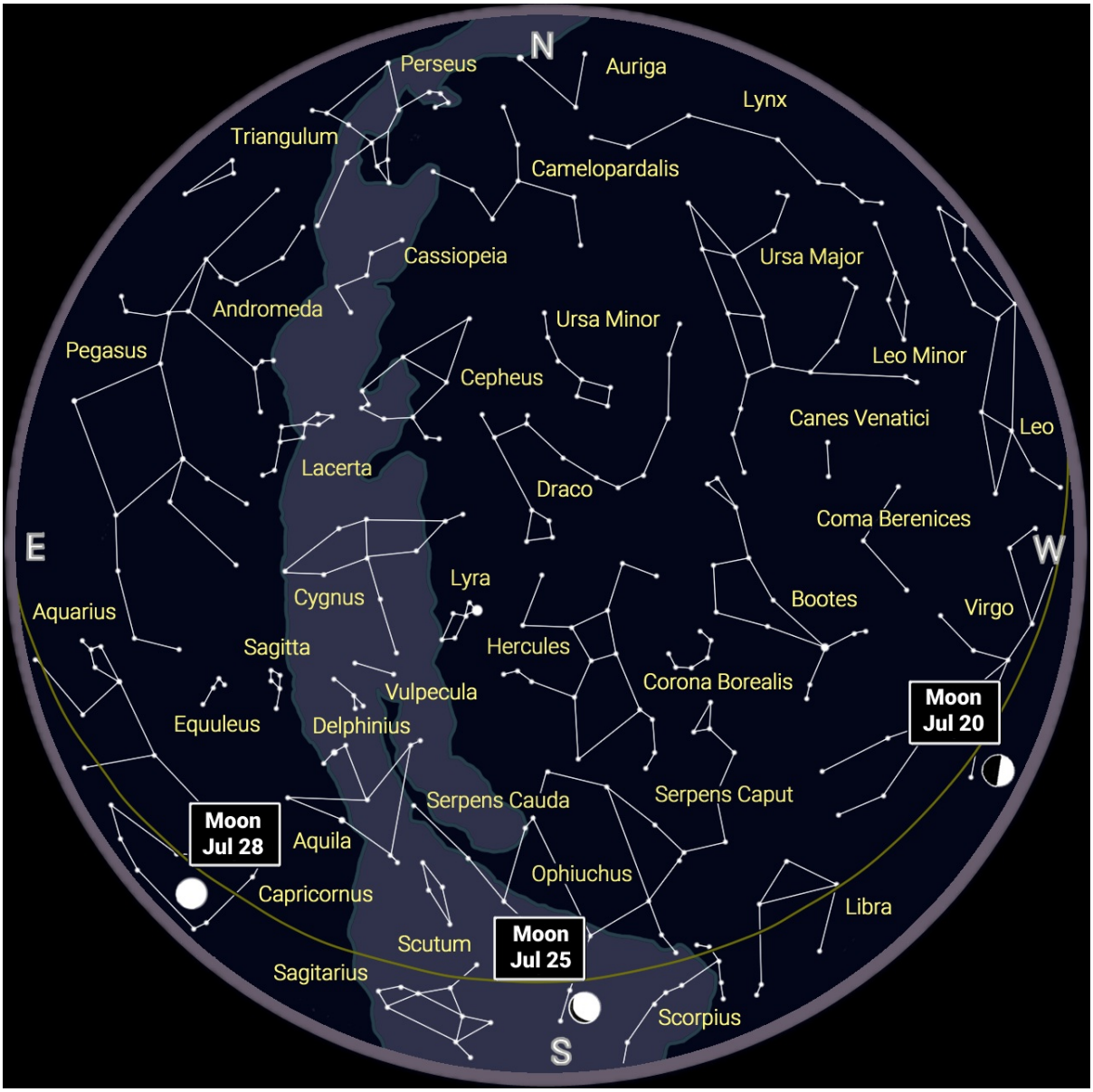
It has only been since the 1980s that we have had the tools to detect these hidden events. When a star goes supernova it releases an enormous burst of ghostly particles called neutrinos. These particles barely interact with matter, they could pass through a light-year of lead without stopping. In the 1980s, the first large neutrino detectors were built, and in 1987 they detected 24 neutrinos from a supernova in the nearby Large Magellanic Cloud.

A supernova anywhere in our own Galaxy today would produce thousands of detections, even if the explosion were completely hidden by dust. We now have several major detectors operating or under construction, including Super-Kamiokande in Japan, IceCube in Antarctica, and DUNE (the Deep Underground Neutrino Experiment), to catch these elusive particles.

As mentioned last month, keep an eye on the northern horizon from about an hour after sunset for electric-blue noctilucent clouds.

6.2 Star chart

Refer back to the lookahead guide in section 6.1 as required.

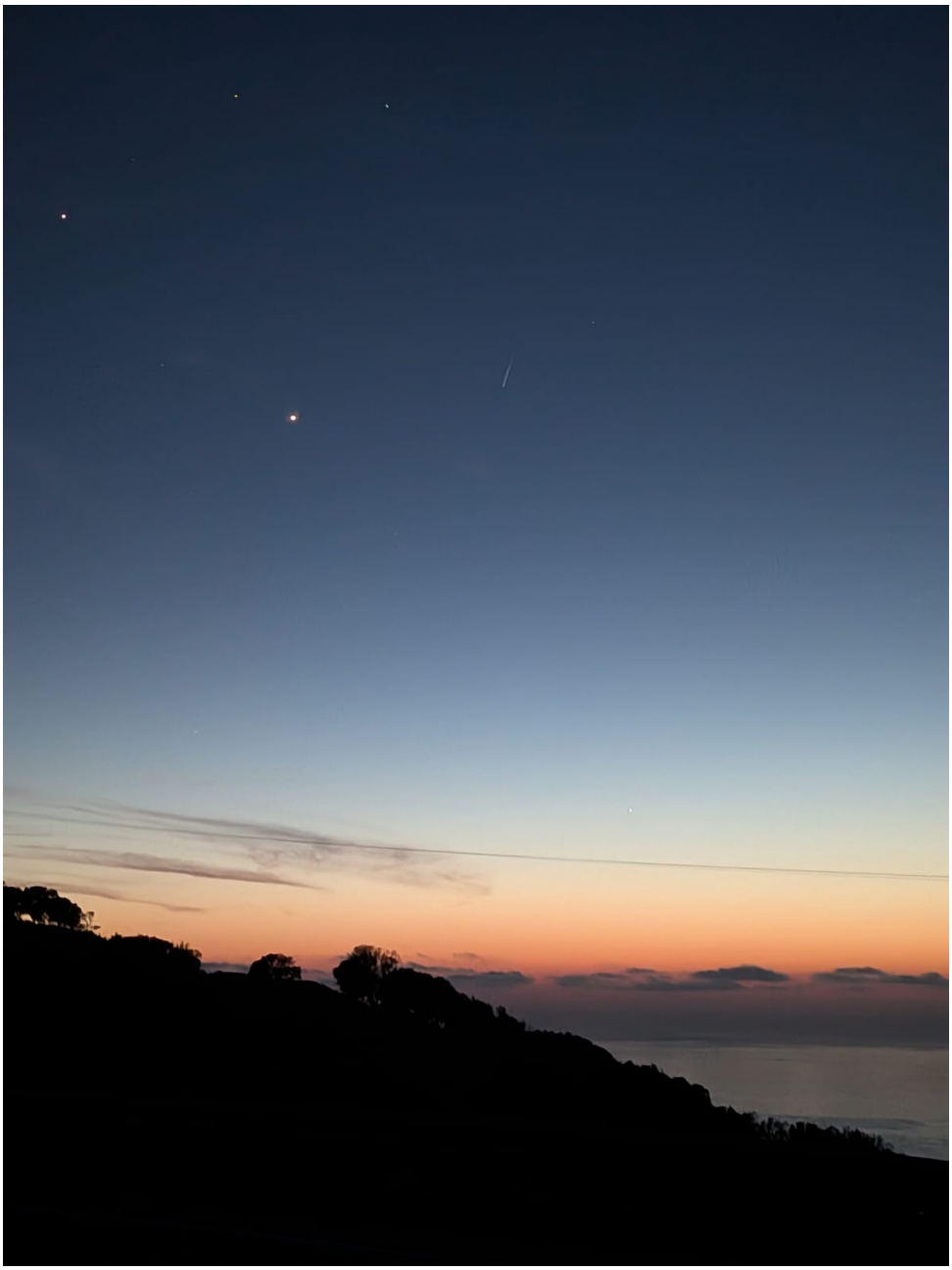


7 LAS image gallery

7.1 Moon imitating the Sun, Isles of Scilly (Mike Ellicock)

An astonishing example of how the Full Moon can illuminate a landscape.

7.2 Three-planet line-up, Cephalonia, Greece (Rod Morgan)



Jupiter top-left, brighter Venus diagonally below it, and faint Mercury a bit above the telephone wire (zoom in to see it).

7.3 Moon at West Pier, Brighton (John the Lightning Tamer)

The West pier is also a site known for murmurations of starlings.

7.4 Star trails time-exposure (Dan Taylor)

The lines that cross the star arcs are produced by flashing aircraft lights. Take a look also at Dan's stunning time-lapse video from Cuckmere Haven (the last link from the WhatsApp feed given in section 4.1 of this issue).

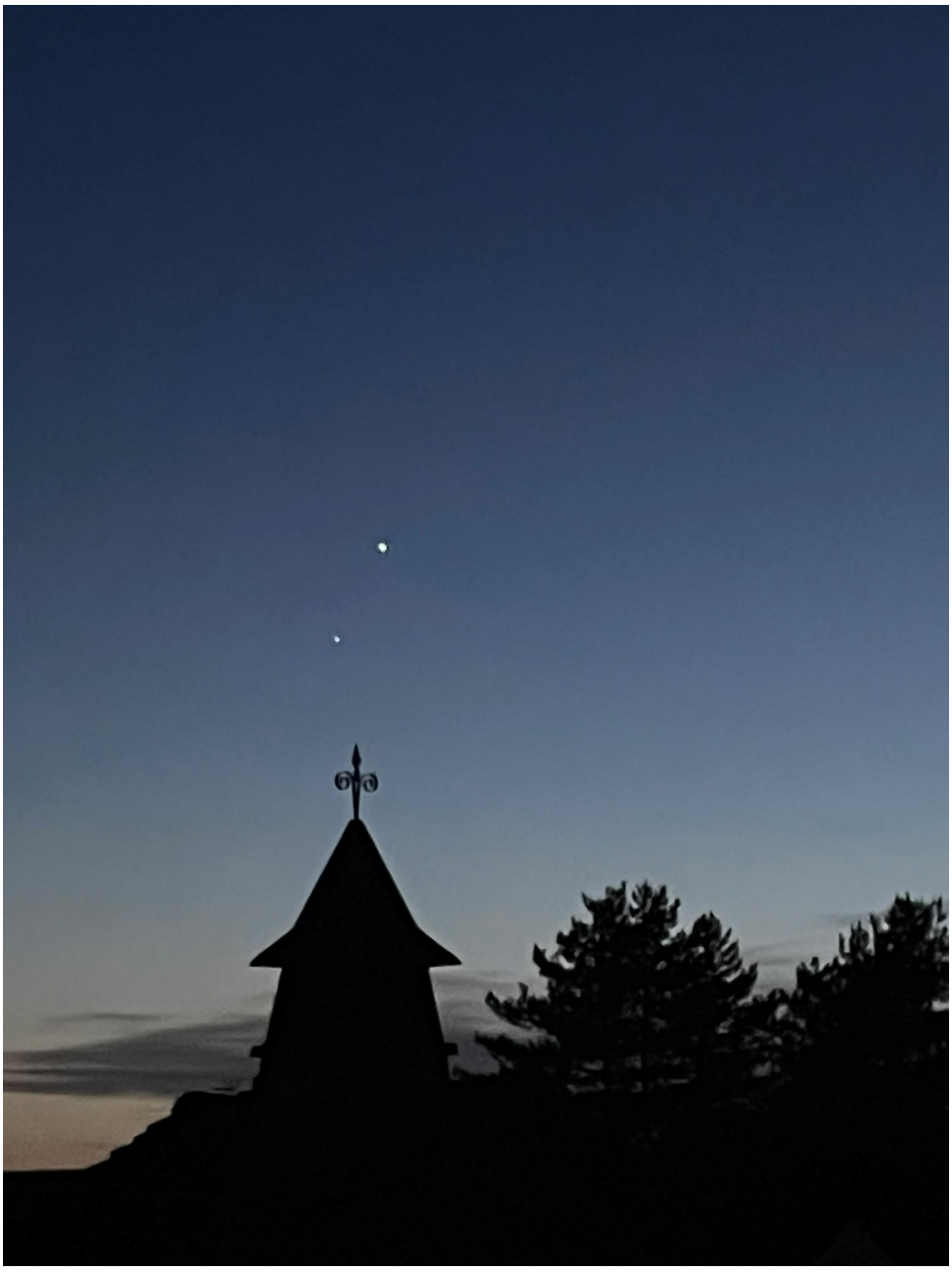
7.5 Solar halo (Kate Land)

See this article on sun haloes from https://ownyourweather.com.

7.6 M16 Eagle Nebula (Roy Marriott)

See this NASA page on M16 for further information. Roy's image compares pretty well with the Hubble Space Telescope's!

7.7 Venus and Jupiter conjunction, Berkshire (Sally Russell)



Venus is the brighter object here, Jupiter the fainter one below it. And in case you were wondering, “The little tower is actually a posh finial on a pyramidal shaped garage roof.”, to quote Sally (where a “finial” means a decorative feature on top of a roof). It certainly beats most garages for elegance.