oasi.org.uk

No. 640 November 2026

OASI News

The newsletter of Orwell Astronomical Society (Ipswich)
Registered Charity 271313

Trustees: Mr Neil Morley Mr David Payne Mr Bill Barton



Louise Manning – Aurora 10th October 2026 from Kesgrave

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Society Notices

Dear Members,

I hope that you are enjoying the night sky at the moment, when it is clear. Saturn is well placed in the evening sky now and the rings are now starting to open up, as viewed from Earth. M31 The Andromeda Galaxy, is also high in the Autumn evening sky and is just about visible to the naked eye from a dark site.

Our meetings at Newbourne continue to be popular, with a good number of members attending. Unfortunately, we have recently seen a decline in members attending our Wednesday meetings at Orwell Park Observatory. When the skies are clear, we prioritise observing through the Tomline Refractor and it would be great to see a few more members enjoying the night sky through this historic instrument.

Don't forget, as a member of OASI, you can attend any of meetings at Orwell Park or Newbourne.

I hope to see you at one of meetings in the coming month.

Clear Skies!

Andy Gibbs, Chairman.

Committee 2026

Chairman	Andy Gibbs	Set overall agenda for OASI, Chair committee meetings, Press and publicity
Secretary	Roy Gooding	Outreach meetings (jointly with Chairman), observatory decoration
Treasurer	Paul Whiting	Finance, Supervision of applications for grants. Visits by outside groups, Observatory tours, public appreciation of astronomy, Outreach activities
Committee	James Appleton	Committee meeting minutes, Web site
	Martin Cook	Membership, Tomline refractor maintenance & user testing
	Matt Leeks	Safety & security
	Peter Richards	Lecture meetings
	Mike Whybray	Astronomy Workshops, Child protection officer, Orwell Park School Astronomy
	Andy Willshere	Librarian
	Adam Honeybell	Newsletter
	Paul Whiting	OASI @ Newbourne

Committee Meeting

Our next committee meeting takes place on Friday 27th November 2026

New Members

John Root	Alison Murphy
Rena Mayoff	Amy Smith
Michael Bloom	Derek Davies

Society Contact details

Website:	https://www.oasi.org.uk
Events:	https://www.oasi.org.uk/Events/Events.php
Email queries:	info@oasi.org.uk
Submissions for Newsletter:	news@oasi.org.uk
Members-only message board:	https://groups.io/g/OASI
Observatory (meeting nights only):	☎ **07749 157843**

Social Media

For other astronomy news and astro pictures try our socials:

Facebook:	https://www.facebook.com/groups/445056098989371
YouTube:	https://www.youtube.com/@orwellastronomical425
WhatsApp:	There is a WhatsApp group. Please email to be added.

We'd like to use social media a little more, since it's a more direct and immediate way to interact with members and potential members. Feel free to post pictures, comments or interesting articles. The more it's used, the more other people will be inclined to use it as well.

Articles for OASI News

News, pictures and articles for this newsletter are always welcome.

Please send tables as separate files in one of these formats (Excel, .csv, OpenOffice)

If you don't feel up to writing a major article, perhaps you might write a short note for OASI News along the lines of "This month I have mostly been observing/constructing/mending/reading/etc."

Please send material for the OASI web site and newsletter e.g., observations, notices of events, general interest articles, to news@oasi.org.uk

The CLOSING date is the **15th** day of the month (i.e. 15th November).

The Newsletter archive is at https://www.oasi.org.uk/archive/newsletters/newsletters.php

Authors, please note that your articles will be publicly available worldwide!

Reproducing articles from OASI News

If you plan to reproduce an article exactly as per OASI News then please contact the Editor – otherwise, as a matter of courtesy, please seek permission from and credit the original source/author. You may not reproduce articles for profit or other commercial purpose.

Meetings and events

We have regular meetings on the 2nd and 4th Monday of the month (usually) at **Newbourne Village Hall**, and every Wednesday at **Orwell Park**. Night sky observing will usually take place when the skies are clear. See website for more events.

Date, Time & Location	Contact	Event
Weekly, every Wednesday, from 20:00, Orwell Park Observatory, Nacton	Martin Cook	Observatory open
Tuesday 3rd November 2026 20:00 Orwell Park Observatory.	tour@oasi.org.uk	Taster evening. £5 per head. Places must be booked in advance by email: tour@oasi.org.uk .
Monday 9th November 2026 19:30 Newbourne Village Hall.	newbourne@oasi.org.uk	Newbourne meeting. Beginners and new members welcome! 19:30 Doors open. If this will be your first visit to a Newbourne meeting, plus drop us a quick email first so that we know to expect you: newbourne@oasi.org.uk .
Monday 16th November 2026 20:00 Zoom lecture. (Login details are provided by email to members.)		Pre-recorded talk by Professor Laura Nuttall, The First Decade of Gravitational Wave Astronomy.
Monday 23rd November 2026 19:30 Newbourne Village Hall.	newbourne@oasi.org.uk	Newbourne meeting. Beginners and new members welcome! 19:30 Doors open. 19:45 Sky Notes by Bill Barton, FRAS and Astro News by Paul Whiting, FRAS. If this will be your first visit to a Newbourne meeting, plus drop us a quick email first so that we know to expect you: newbourne@oasi.org.uk .
Friday 27th November 2026 20:00 Via Zoom.		Committee meeting. All members are invited to attend. (Login details will be provided by email to members.)

OASI @ Orwell Park

There are regular meetings every Wednesday evening from 8pm. Access is controlled by a gate and a fob. The entrance is gate 2 is on Church Road, What3Words is **tour.fuse.banks**

Access into the School Grounds and Observatory Tower

The route is as follows:



• Enter through gate 2 (gate 1 being the main gate) and park inside as per the attached map.

• Enter the school through the double black doors as indicated on the map. A key fob will be required to open the door.

• Continue straight through the next two sets of double doors.

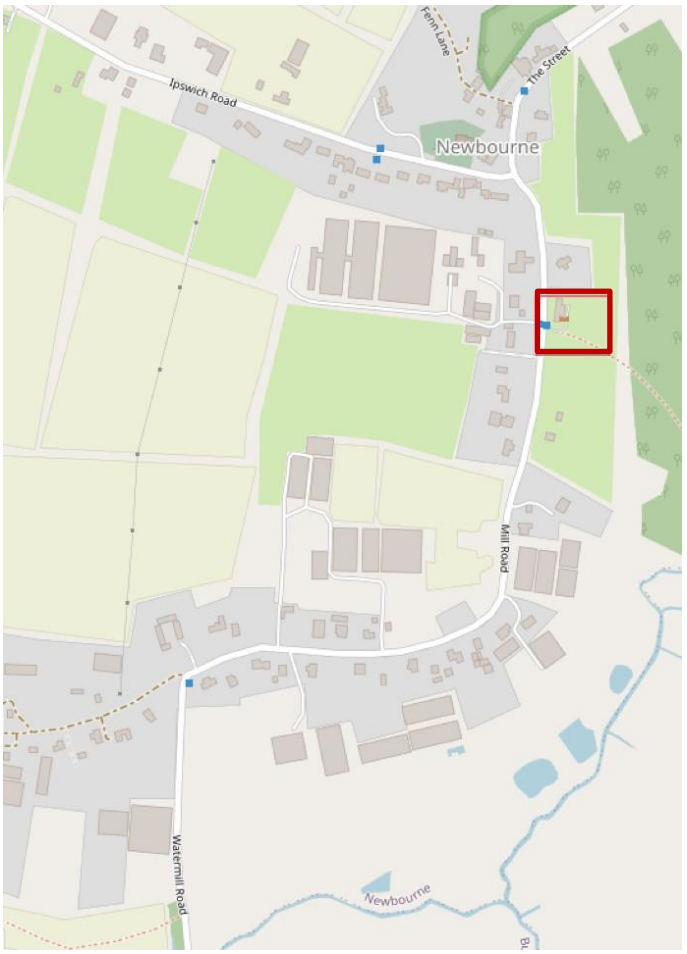
• Turn left at the end of the short corridor then immediately right.

• Pass through the single door and on your left you will find the staircase leading to the observatory.

• On no account must you deviate from this route.

When leaving the observatory use the same route but in reverse. Please keep noise to a minimum as there are staff quarters nearby.

OASI @ Newbourne



newbourne@oasi.org.uk

We meet at Newbourne Village Hall, Mill Lane, IP12 4NP on the 2nd and 4th Mondays from 19:30.

What3Words **scars.atlas.printing**

Visitors are welcome but we do ask you to join the Society after two visits.

http://www.oasi.org.uk/OASI/Membership.php

Newbourne dates for 2026		
November	9	23(S)
December	14(Q)	

We open up for all meetings at 7:30pm.

Astro News (A) / Sky Notes (S) at 7:45pm followed by any Talks (T), Workshops (W) and occasional Quiz (Q).

# indicates a change to the normal monthly pattern.

Forthcoming Outreach Programmes 2026

No outreaches this month

BAA news, events & webinars

BAA: https://britastro.org/events/future-events

Events correct at time of publication, please go to website for latest information.

Date	Event
Friday 13 November	SPA residential weekend 2026
Saturday 5 December	Back to Basics - Aurora Special - Ipswich
Saturday 12 December	BAA Christmas Meeting

The BAA Radio Astronomy Section

The BAA Radio Astronomy Section have been enjoying talks, seminars and tutorials via Zoom and these are available on the BAA YouTube channel https://www.youtube.com/user/britishastronomical/playlists.

The Night Sky in November 2026

Event times are for Orwell Park Observatory at 52.0096°N, 1.2305°E. Times are **GMT** unless otherwise stated.

Sun, Moon and planets

Sources: http://heavens-above.com/PlanetSummary.aspx http://heavens-above.com/moon.aspx

Object	Date	Rise	Set	Mag.	Notes
Sun☉	1	06:50	16:27		
	30	07:39	15:48		
Moon ☾	1	22:20	13:39		Last Quarter : 01 November 20:28 New Moon : 09 November 07:02 Apogee : 13 November 17:57 First Quarter : 17 November 11:48 Full Moon : 24 November 14:54 Perigee : 25 November 21:08
	30	22:57	12:20		
Mercury☿	1	07:41	16:30	3.6	
	30	05:59	15:09	-0.7	
Venus♀	1	05:56	15:28	-4.2	
	30	03:48	14:17	-4.9	
Mars♂	1	23:04	14:13	0.9	
	30	22:22	12:49	0.5	
Jupiter♃	1	23:39	14:18	-2.0	
	30	21:58	12:29	-2.2	
Saturn♄	1	15:40	04:01	0.5	
	30	13:43	02:01	0.6	
Uranus♅	1	17:20	09:25	5.6	
	30	15:23	07:25	5.6	
Neptune♆	1	15:20	03:24	7.7	
	30	13:25	01:28	7.7	

Occultations during November 2026

https://iota-es.de/moon/grazing_descrx101.html and
http://www.lunar-occultations.com/iota/bstar/bstar.htm

Observers are encouraged to download and install the Occult software program [Windows only] to generate predictions for their own particular site coordinates.

Meteor showers during November 2026

Name	Date of Maximum	Dates visible	Max z	Description
Orionids	21 October	2 Oct-7 Nov	15	Fast meteors with fine trains from Comet Halley; best after midnight, but a 72% waxing gibbous Moon interferes near the peak
Southern Taurids	5 November	20 Sep-20 Nov	7	Low rates but occasional bright, slow fireballs; associated with Comet Encke
Northern Taurids	12 November	20 Oct-10 Dec	5	Slow meteors with occasional bright fireballs; favourable moonlight shortly after new Moon
Leonids	17 November	6-30 Nov	15	Fast meteors with fine trains; best after midnight, with first-quarter moonlight around the peak
Alpha Monocerotids	22 November	15-25 Nov	Variable	Usually weak but capable of brief outbursts; predicted rate is variable

See also https://www.rmg.co.uk/stories/topics/meteor-shower-guide

For radio observation, use reflections from Graves Radar on 143.049MHz or the Brams transmitter in Belgium on 49.97MHz and UK GB3MBA on 50.408MHz https://www.ukmeteorbeacon.org/Home

See also https://www.popastro.com/main_spa1/meteor/radio-meteor-observing-2020/.

Comets

Source : https://heavens-above.com/Comets.aspx.

Comet	Brightness	Date of last reported observation	Angular separation from Sun	Constellation
10P Tempel 2	11.8	2026-Oct-31	120°	Sculptor
220P McNaught	12.9	2026-Oct-31	163°	Cetus
C/2026 A2 Bok	13.0	2026-Oct-31	99°	Cygnus
C/2024 T5 ATLAS	13.3	2026-Oct-31	124°	Lepus
161P Hartley-IRAS	13.6	2026-Oct-31	85°	Aquila
29P Schwassmann-Wachmann 1	13.6	2026-Oct-31	30°	Virgo
P/2026 R2 Leonard	14.2	2026-Oct-29	53°	Triangulum Australe
88P Howell	14.5	2026-Oct-31	177°	Aries
169P NEAT	14.7	2026-Oct-31	50°	Leo
C/2014 UN271 Bernardinelli-Bernstein	14.7	2026-Oct-20	79°	Volans
78P Gehrels	15.8	2026-Oct-31	100°	Cancer
11P Tempel-Swift-LINEAR	15.8	2026-Oct-31	163°	Triangulum
260P McNaught	15.8	2026-Oct-30	121°	Auriga
C/2024 J3 ATLAS	15.8	2026-Oct-31	80°	Lyra

Visible ISS passes >30º max altitude for November 2026

Source: http://heavens-above.com/PassSummary.aspx?satid=25544

Times are **GMT**.
Predictions are approximate (01/11/26) due to craft adjustments. Check the day before.
There are more passes than this, but they're below 30 degrees, so will be harder to spot unless you have good weather and can see the horizon. As with stella/planetary brightness, the more negative the magnitude, the brighter it is.

Date	Brightness	Start			Highest point			End		
	(mag)	Time	Alt.	Az.	Time	Alt.	Az.	Time	Alt.	Az.
16 Nov	-0.9	18:23	10°	WSW	18:25	44°	SW	18:25	44°	SW
17 Nov	-1.6	17:35	10°	SW	17:38	45°	SSE	17:39	31°	ESE
18 Nov	-1.1	16:47	10°	SW	16:50	34°	SSE	16:53	12°	E
18 Nov	-0.8	18:24	10°	W	18:26	50°	WSW	18:26	50°	WSW
19 Nov	-2.2	17:36	10°	WSW	17:39	71°	SSE	17:40	40°	E
20 Nov	-1.8	16:48	10°	WSW	16:51	58°	SSE	16:54	12°	E
20 Nov	-0.8	18:25	10°	W	18:27	50°	W	18:27	50°	W
21 Nov	-2.3	17:37	10°	W	17:40	86°	S	17:41	41°	E
22 Nov	-2.1	16:49	10°	W	16:52	80°	S	16:55	14°	E
22 Nov	-0.7	18:26	10°	W	18:28	48°	W	18:28	48°	W
23 Nov	-2.3	17:38	10°	W	17:41	81°	S	17:42	41°	ESE
24 Nov	-2.1	16:50	10°	W	16:53	86°	S	16:57	12°	E
24 Nov	-0.3	18:27	10°	W	18:29	40°	WSW	18:29	40°	WSW
25 Nov	-1.6	17:39	10°	W	17:42	60°	SSW	17:44	33°	SE
26 Nov	-1.8	16:51	10°	W	16:54	72°	SSW	16:57	12°	ESE
27 Nov	-0.2	17:40	10°	W	17:43	36°	SSW	17:45	17°	SSE
28 Nov	-0.8	16:52	10°	W	16:55	47°	SSW	16:58	12°	SE

A short adventure into WIMPs and Dark Matter.

From the library: Andy Willshere (his 99th!)

With the number of research papers and articles being written, I thought that we could have a quick look at the subject for our next library article.

I think that the first point of call is the WIMP. This is a 'Weak Interacting Massive Particle' that is an electromagnetically neutral, heavy, sub-atomic particle, that is only talked about as a hypothesis when considering the formation of most dark matter. They naturally arise in supersymmetric extensions of the Standard Model and are weakly interactive. The group have been described as dark matter particles that were frozen out at the natural point where the annihilation rate falls below the Hubble expansion rate by a condition described as thermal equilibrium (*two structures that have the same temperatures will not trade any net heat energy*) and are considered to be non-baryonic.(*not comprised of neutrons and protons*).

Once the particles began to freeze out, they left numerous artefacts behind depending upon their information exchange rates and mass, and as they assumed to move at non-relativistic speed, it makes them the ideal aspirant for "cold dark matter". There are however a few other contenders in the race; heavy right-handed neutrinos, sterile neutrinos, primordial black holes and axions have also been considered. The latter is thought to be exceptionally light (μeV-meV range) subatomic particles with low mass and very weakly interacting.

We have now dipped our toes into a WIMP, so let us do the same for dark matter; dark because we cannot see it, its invisible. Similarly to WIMPs, dark matter exists within a hypothetical form. It is effectively invisible and does not respond to electromagnetic radiation. So why do we think it exists? Scientists believe that dark matter can be inferred by gravitational effects, for example, galaxy evolution / formation and movement within galaxy clusters, as well as gravitational lensing, It is thought that it may provide a skeleton structure for cosmic complexes. As has been stated, dark matter can be implied from gravitational effects. In the recent Planck-derived value for the Cold Dark Matter blueprint, the mass-energy component of the universe is 5% ordinary matter, 26% Dark Matter and 69% dark energy.

How can we prove that both WIMPs and dark matter exist? Are scientists working with experiments within the present time-scale. The short answer to this is yes! There are several candidates for very responsive detectors. These use liquid-xenon and have names such as LUX-ZEPLIN and XENONnT, and were built to seize faint nuclear recoils that a WIMP may produce. Why would we use Xenon. Well it has a high atomic mass, it absorbs background radiation and detectors can be built up to very large masses, and it is easy to decontaminate to ultra-low radioactivity. It is surmised that if a WIMP strikes a xenon nucleus it will produce a minute flash of scintillation light and will ionize electrons producing another flash of light. Xenon will increase sensitivity to weightier WIMPs ≻ 10GeV/c2. The LUX-ZEPLIN (LZ) is situated in the U.S.A. within South Dakota and is about one mile underground and using large quantities of xenon ≺ 10 tonnes liquid xenon) is primarily designed to catch nuclear recoils. The WIMP standard mass range is considered to be within the approximate ranges of 1GeV to 10TeV. However, radioactivity within detector materials, cosmic ray neutrons and solar neutrinos all continue to make WIMP detection very difficult.

There are still no definitive confirmed detections after decades of searching for a WIMP. However the Lux-Zeplin(LZ) Dark Matter experiment reported detecting a single contender particle event which was presented on September 1st 2026 at the Particle Astrophysics Conference in Japan. This result does not meet the necessary statistical threshold required to claim discovery. The jury is therefore still out on this illusive particle.

References:

[1903.03026] Direct Detection of WIMP Dark Matter: Concepts and Status

WIMPDirect-24.pdf

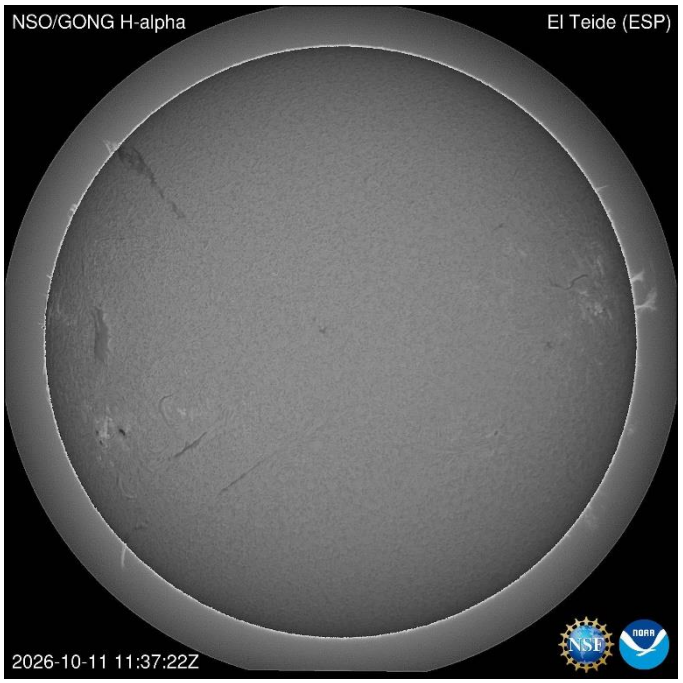
Weakly interacting massive particle - Wikipedia

LZ experiment sees surprising result in search for dark matter | Brown University

Member observations

Neil Morley

Today's was completed between 11:05 and 11:20 UT using a Lunt LS35 Hydrogen-Alpha refractor (primarily a visual instrument) using a 20mm Plossl eyepiece providing a magnification of 20x. This is the first sketch since I exchanged the original Lunt blue filter with a BelOptik UV/IR on Schott KG5 glass. The new filter maintains eye safety while providing a brighter image more on a par with OASI's Coronado PST following its repair. This allows higher magnifications when needed.

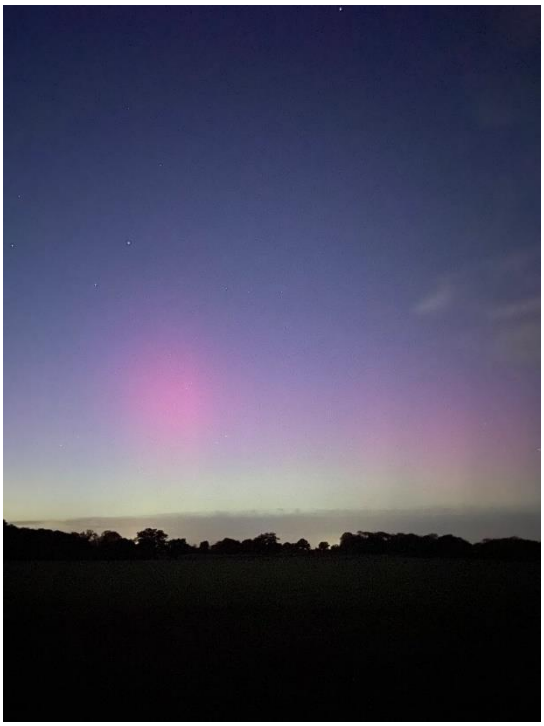






Neil Morley Sundogs – from Ipswich 8th October 2026

Aurora 10th October 2026



Mike S



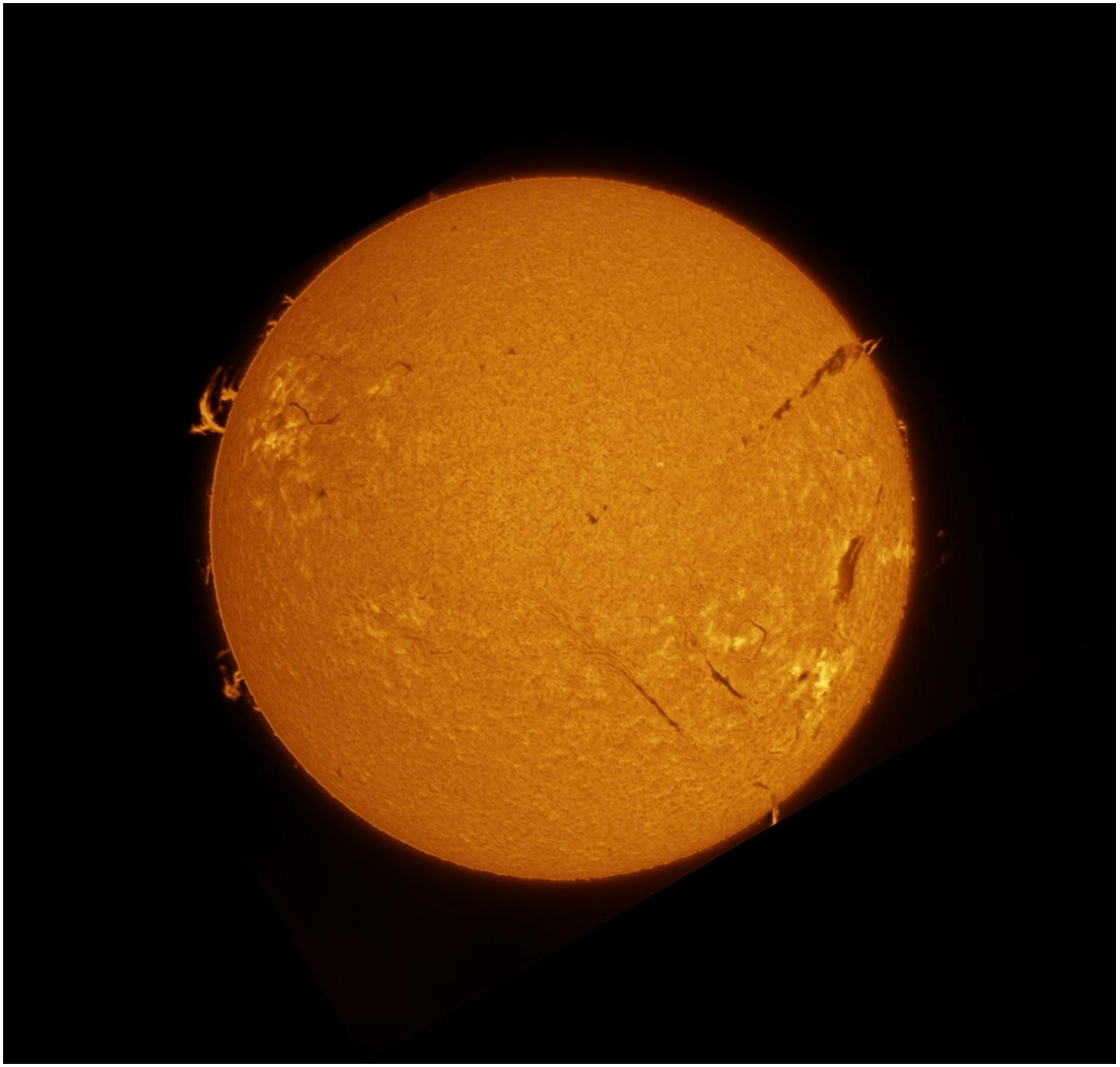
Louise Manning - Kesgrave



Martin Cook: 2 sec exposure with a Samsung S20. Looking North from East Ipswich.

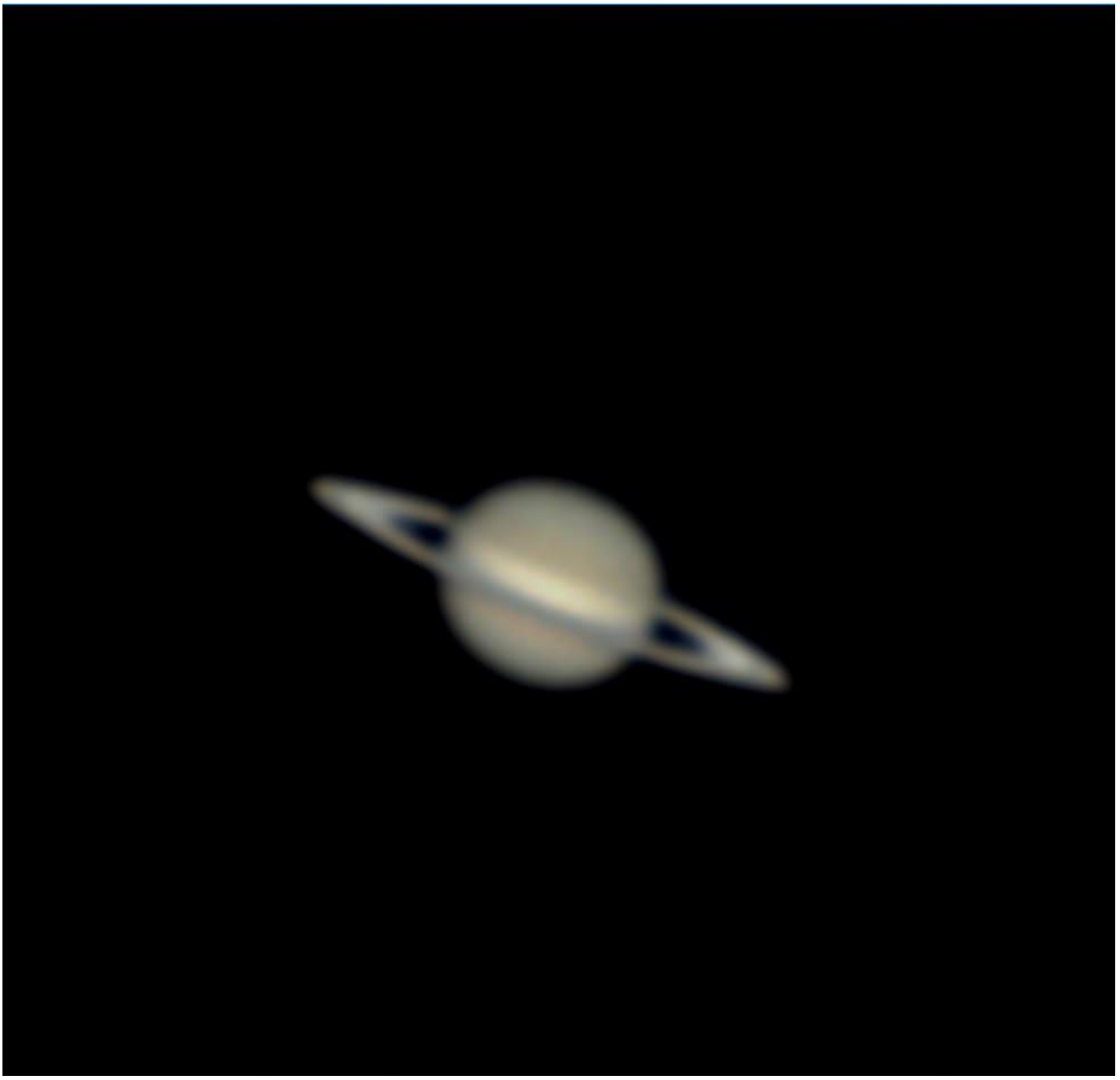
Around 7:34pm

Steve McElvanney – The Sun



Solar disk - Heliostar 10th October – 10:52. Based on best 1200 stacked images and processing in PixInsight.

Andy Gibbs – Saturn



Saturn imaged on 13-10-26. Equipment used: Meade LX200 ACF with 2x Barlow lens. Software used: Sharpcap 4, PIPP, Autostakkert! 3, Registax 6 and Affinity.