The Newsletter

Kelling Heath 2013: Mike Norris's tent with his and Michael Atkins's telescope

OASI Committee Contacts and Responsibilities

Neil Morley	Chairman	[redacted]	Chair committee meetings. Represent OASI to external bodies.
Roy Gooding	Secretary		Respond to enquiries. Press & publicity Outreach meetings Open days
Paul Whiting FRAS	Treasurer		Finance Visits from outside groups
James Appleton	Committee		Minutes of committee meetings. Web site.
Bill Barton FRAS	Committee		Safety & security
Martin Cook	Committee		Membership Tomline refractor maintenance
Tina Hammond	Committee		Librarian
Peter Richards	Committee		Lecture meetings Email distribution lists
Eric Sims	Committee		Newsletter
John Wainwright	Committee		Equipment curator
Mike Whybray	Committee		Workshops

Trustees

Mr Roy Adams
Mr David Brown
Mr David Payne

Honorary President

Dr Allan Chapman D.Phil MA FRAS

The OASI mailing list

OASI has an email distribution list which all which all OASI members can join to keep in touch. If you want to join the list please send an email to

[redacted]

The email needs to Include your name (as you gave It on your membership application). Including your name is essential so we can confirm you are an OASI member (particularly If you have a cryptic email username:-).

Please note that the "oasi-subscribe" address above is not the actual email list.

Society Notices

by Roy Gooding

Access into the School Grounds and Observatory Tower

Please use the third gate into the school grounds. The code for the gate is on the back of your membership card. If the black door entrance at the base of the observatory tower is locked, please phone the observatory mobile during meeting hours.

Annual General Meeting 18h January 2014

All members are invited to attend the AGM. Start time 20:00 Venue: Methodist Church Hall

The Newsletter

To receive the electronic version of the newsletter (which you can also print in A4 or A5 booklet format) you will have to be a members of the oasi yahoo group. To subscribe to this group please email

Newsletters will still continue to be printed by Eric and mailed to those who have expressed a preference for the printed version.

Welcome to New Members

John Baldwin	James Firebrace and family	
Avtar Nagra	Phillip Roberts	Chris Stevens

External Events

I have contacted Sam Pollard about meetings in Christchurch Park, but he has now moved to a different job. I am waiting for are reply from his replacement.

Just received a reply at time of writing.

2014

Meeting	Venue	Date
National Astronomy Week	Events TBA	1 – 8 March

Open Weekend 2013

The Open Weekend this year will be Friday 22nd and Saturday 23rd of November. These two dates coincide with a long week in the school's autumn term. The Pupils will be away from the school.

Doors open for the public at 19:30

Set up time from 18:30

As usual as much help as possible is required to make this another successful fund raising Open Weekend.

Help is required in five areas

Car parking	Reception desk	Telescopes on the balconies
Tomline refractor	Telescopes in the field	

If you are only available to help for a short time your presence will still be appreciated.

The OASI Christmas Meal

Wednesday 4th December

The White Horse, Church Road Felixstowe 20:00

Starters

Pork and duck terrine served with fig chutney and balsamic glaze.
Curried parsnip soup with poppadoms
Smoked trout with cucumber, dill and yogurt dressing
Toasted goats cheese with roasted red pepper topped with olive salad in a garlic and herb dressing

Main

Roasted Norfolk turkey served with all the traditional trimmings
Mixed game ragout, herb mash and roasted button onions
Fillet of Scottish salmon with scallion and saffron sauce, wilted spinach and baby potatoes
Wild mushroom, shallot and spinach parcel topped with a port wine sauce
All main courses are server with fresh vegetables

Dessert

Traditional Christmas pudding served with Cognac sauce
Chocolate brownie with white chocolate ice cream
Vanilla scented panna cotta with spiced orange
Selection of chesses and biscuits with fruit chutney

Deposit £10 per person
Balance £14.50 per person

There is a limited space for only 30 at The White Horse, in the private function room (converted stable block – appropriate for Christmas)

The White Horse requires the deposit by mid November so I will take

last orders on the 8th November

Meal selection and deposit to Roy Gooding

Society Events

Date and Time	Location	Contact	Event
Every Wednesday, 20:00	Orwell Park Observatory	Martin Cook, Roy Gooding	General observation (weather permitting) using a variety of telescopes.
Monday 04 November 2013, 20:00	Orwell Park Observatory	Gerry Pilling, Paddy O'Sullivan	Small telescopes observing evening. Observing targets: Cassiopeia, Andromeda, Pegasus.
Wednesday 06 November 2013, 19:30 for 19:45 start	Nacton Village Hall	James Appleton, Martin Cook and Alan Smith	Astronomy Workshop Ole Rømer and Estimation of the Speed of Light
Thursday 7 November 2013 19:00	Orwell Park Observatory	Paul Whiting	Observatory visit by 1st Capel Cubs
Saturday 09 November 2013, 17:30	Newbourne Village Hall	Mike Norris Mike O'Mahony	**Public access event**: OASI Newbourne Observing Group open evening. Booking not necessary, simply turn up
Monday 11 November 2013, 19:00-late	Newbourne Village Hall	Mike Norris Mike O'Mahony	OASI Newbourne Observing Group. Bring your telescope to our dark-sky site. (Talks on astronomy if skies are cloudy.)
Tuesday 12 November 2013, 20:00	Orwell Park Observatory	Paul Whiting	Taster evening for people considering joining OASI.
Thursday 14 November 2013 20:00	Orwell Park Observatory	Paul Whiting	Observatory visit by U3A
Friday 22 & Saturday 23 November 2013	Orwell Park School	Roy Gooding	**Public access event**: Observatory Open Days. See page 3 Booking not necessary.
Tuesday 26 November 2013 19:30	Orwell Park School	Paul Whiting	Observatory visit by 1st Kesgrave Scouts I
Thursday 28 November 2013, 19:30-	Orwell Park School	Paul Whiting	1st Kesgrave Scouts II
Thursday 28 November 2013, 19:00-late	Newbourne Village Hall	Mike Norris Mike O'Mahony	OASI Newbourne Observing Group. Bring your telescope to our dark-sky site. (Talks on astronomy if skies are cloudy.)
Tuesday 03 December 2013, 20:00	Orwell Park Observatory	Paul Whiting	Taster evening for people considering joining OASI.
Wednesday 4 Dec 20:00	White Horse, Church Rd, Felixstowe	Roy Gooding	Christmas meal 2013 See page 4 for details

Date and Time	Location	Contact	Event
Monday 09 December 2013, 19:00-late	Newbourne Village Hall	Mike Norris Mike O'Mahony	OASI Newbourne Observing Group. Bring your telescope to our dark-sky site. (Talks on astronomy if skies are cloudy.)
Tuesday 10 December 2013, 20:00	Orwell Park Observatory	Gerry Pilling, Paddy O'Sullivan	Small telescopes observing evening. Observing targets: Pegasus, Triangulum.
Wednesday 11 December 2013, 19:30 for 19:45 start	Nacton Village Hall	David Murton and Mike O'Mahony	Astronomy Workshop Astrophotography with a Digital Camera
Saturday 14 December 2013, time TBC	"The Dip", Felixstowe	Roy Gooding	Geminids Meteor Watch
Thursday 19 December 2013, 19:00-late	Newbourne Village Hall	Mike Norris Mike O'Mahony	OASI Newbourne Observing Group. Bring your telescope to our dark-sky site. (Talks on astronomy if skies are cloudy.)

2014

Saturday 18 Jan 8pm	Methodist Church Hall, Museum St Ipswich		**OASI Annual General Meeting**
Saturday 01 - Saturday 08 March 2014	Venues TBA	Roy Gooding	**Public access events** TBA to mark National Astronomy Week 2014

For the latest event details, please see www.oasi.org.uk/Events/Events.shtml

For other astronomy news and astropictures try these Twitter feeds:-

@OASIpswich	@AAVSO	@SkyandTelescope
@NorthEssexAstro	@FlareAware	@BBC_Space
@NorwichAS	@AstronomyNow	@Chandraxray
@CassiniSaturn	@AstronomyMag	@kielder_obs
@NASA	@AstronomyFM	@ROGAstronomers
@NASAKennedy	@Observatory_Sci	@VirtualAstro
@NASAWebbTelescp	@universetoday	@SunViewer
@NASA_Johnson	@SETIInstitute	@popastro
@csa_asc	@SunViewer	@Paul_Abel
@AwesomeAstroPod	@PeoplesAstro	@AvertedVision
@SPACEdotcom	@ScienceNewsOrg	@OASoc

If you don't have a Twitter account, please note there is no compulsion to follow folk who wish to tell the world what type of biscuit they are eating or their views on One Direction.

https://twitter.com/

Night Sky in November

Sun and planets

Roy Gooding

Object	Date	Rise	Set	Mag.	Notes
Sun	1	06:51	6:27		
	30	07:40	15:48		
Mercury	1	07:03	16:22	-0.5	November will be the best morning apparition of Mercury this year. Greatest western elongation on the18th
	30	06:10	15:11		
Venus	1	11:33	18:16	-4.4	Venus will be greatest eastern elongation on the 1st of the month
	30	11:11	18:31		
Mars	1	01:08	14:52	1.4	Mars will observable after midnight
	30	00:46	13:26		
Jupiter	1	20:30	12:49	-2.3	Jupiter is now rising for observation in the early evening sky
	30	18:31	10:52		
Saturn	1	07:10	16:48	0.8	Saturn will be visible before sun rise
	30	05:35	15:02		
Uranus	1	15:27	04:08	5.8	Uranus remains in Pisces
	30	13:32	02:10		
Neptune	1	14:26	00:38	7.9	Neptune remains in Aquarius
	30	12:31	17:36		

Moon in November

New Moon	1st Quarter	Full Moon	3rd Quarter
3rd	10th	17th	25th

Meteor Shower

Source: BAA Handbook p98

Shower	Limits	Maximum	ZHR
Taurids	Oct 20th to Nov. 30th	Nov. 5th to 12th	10
Leonids	Nov. 15th to 20th	Nov. 17th 19:00	20

2013 Comets ISON

This may be very bright but this may be over optimistic. Will be visible before and after Christmas.

Occultations during November

James Appleton

The table lists lunar occultations which occur during the month under favourable circumstances. The data relate to Orwell Park Observatory but will be similar at nearby locations.

Date	Time (UT)	D/R	Lunar Phase	Sun Alt (d)	Star Alt (d)	Mag	Star
07 Nov	17:36:50	D	0.22+	-13	14	6.8	ZC 2733
10 Nov	19:16:32	D	0.56+	-29	28	7.0	ZC 3184
10 Nov	19:18:02	D	0.56+	-29	28	5.1	46 Cap
16 Nov	18:25:43	D	0.99+	-22	24	5.5	43 Ari
22 Nov	00:23:37	D	0.83-	-57	42	3.6	54 Gem
	01:18:39	R		-53	48		

A few useful web links

Clubs & Societies

Royal Astronomical Society	www.ras.org.uk/
Federation of Astronomical Societies	www.fedastro.org.uk/fas/
Society for Popular Astronomy	www.popastro.com/index.php
Breckland Skies	www.brecklandastro.org.uk/index.html
British Astronomical Association	britastro.org/
North Essex Astro Soc	northessexastro.wordpress.com/
North Norfolk Astro Soc	www.nnas.org/
Stargazers Lounge	stargazerslounge.com/

Astro data sources

Heavens Above	heavens-above.com/
Rise/Set/Transit Times for Major Solar System Bodies and Bright Stars	aa.usno.navy.mil/data/docs/mrst.php

DIY

Bahtinov Focussing Mask Generator	astrojargon.net/MaskGenerator.aspx?AspxAutoDetectCookieSupport=1
Make a Bhatinov Mask	www.deepskywatch.com/Articles/make-bahtinov-mask.html
Making a Dobsonian	www.scopemaking.net/dobson/dobson.htm
Modifying a Skyliner 200 Dob	www.jim-easterbrook.me.uk/astro/scope/dob/
Building an equatorial platform for a Dob	members.ziggo.nl/jhm.vangastel/Astronomy/Poncet/e_index.htm
An observatory design	www.possumobservatory.co.nz/12-00Observatory1.htm

No doubt you have your own favourites – so please send them to

news@oasi.org.uk

October was a Busy Month!

Roy Gooding

If you had been taking any notice of the events for October you would have noticed that the month was one of the busiest of the year. Apart from our normal monthly events at the observatory, Newbourne, the first workshop of the season at Nacton village hall, there were many outside events to attend.

The 5th October was the main event weekend of the The Autumn Equinox Sky Camp 2013 at Kelling Heath. The 12th and 19th saw the SPA & FAS conventions at the Institute of Astronomy in Cambridge. In between times there was the outreach meeting at Felixstowe Ferry Golf club and a SHA meeting. No member attended all of these events. But many did attend more than one

For many years I have been attending the Saturday, of the main event weekend, of the Autumn Equinox Sky Camp 2013 at Kelling. Mainly to look around the trade stands and have a wander round the camp site looking at the various telescopes on display. This year was a little different as I knew that Mike Norris and David Murton were camping there for the weekend. The camp site is very extensive so I imagined that it could take a while to find them. However as soon as I entered the camping area the very first thing I saw was the OASI yellow banner. I spent the next hour or so talking with Mike Norris and David Murton in Mike's large blue tent. Mike's tent was also being shared with a new OASI member who I met for the first time, Michael Atkins

The rest of day was spent looking round the trade stands, walking round the camp site, and attending a lecture. There were a large number of Dobsonians wth apertures of 20” or more. In some instances the arrangement of step ladders, for getting to the eyepiece when the scope was pointed near to the zenith, seemed very precarious

There has always been a series of lectures arranged for this Saturday, but this year was the first time I had attended. The first lecture was on binocular astronomy and there was very little I did not already know.

It was decided to go the onsite restaurant for a meal around 18:00. Unfortunately tables had to have been per-booked and there were no spare tables, so we tried the cafe next door. As there was not anything I liked on offer. David took me back the Sheringham to catch the back to Norwich. As by this time I hid missed the last Coasthopper bus

On Saturday 12th the SPA were holding their biannual convention at the Institute of Astronomy in Cambridge. This year also happens to be the SPA's 60th anniversary year. This year we were well represented, with seven members in attendance. John Wainwright took Pete and Nicky Richards and Jennie Wood. I got a lift with Andy and Mandy Gibbs.

The event included a series of lectures, trade stands, SPA observing section displays, and guided tours round the observatories. The SPA are the only group who organise conventions at Cambridge to supply sandwiches for purchase.

As this is the 60th anniversary year of the SPA, they held a celebratory reception after the convention. Only about 40 to 50 people stayed for the reception. It included a buffet with wine. After about an hour the reception started to wind down so it was decided to head for home

Visit to Society Of Popular Astronomy Convention at the Institute Of Astronomy Cambridge

By Andy Gibbs.

Seven members of OASI attended the Society of Popular Astronomy convention at the Cambridge Institute of Astronomy which was this year celebrating the Diamond Jubilee of the SPA.

The first lecture was delivered by Mark Hurn, describing how the Cambridge Observatories have evolved since 1953. There was only thirteen staff listed in 1953 including the cleaner!

Next we had a history of Astro Imaging by Nik Szymanek. Given the limited equipment available in the late 19th Century, some impressive results were obtained. Of course the images that Nik produces now from his back garden are jaw-dropping, due to advances in Autoguiding, CCD chips and software.

During the Lunch break we had an opportunity to browse the trade stalls. I was on my best behaviour, all I bought was another SPA mug for my collection!

Dr Ralph Cordey from Astrium gave the next lecture on the role that his company were undertaking in construction for a Martian rover. This is due to be launched in 2018 on a joint ESA - NASA mission to be called EXOMARS.

Next, The Astronomer Royal, Prof. the Lord Rees, delivered The Sir Patrick Moore Lecture detailing the breakthroughs in Astronomy in the last 60 years and would we see as many breakthroughs in the next sixty years?

During the next lecture on High Frequency Radio Astronomy, a few of us decided to join a tour of the IoA telescopes. Unfortunately, due to refurbishment, we were not able to view the Northumberland Telescope, but we were given a tour of the Thorrowgood Telescope. This is an 8 inch Cooke Refractor from 1864 which just pre-dates the Tomline, but is smaller in aperture.

It was time for Mandy and me to head home after a very enjoyable day. Roy and the others stayed on for an after-event reception.

Other OASI members present were:-

Mandy Gibbs, Roy Gooding, John Wainwright, Jenni Wood, Pete and Nicky Richards.

Newbourne Observing Group

We meet at The Newbourne Village Hall, Mill Lane, Newbourne, IPl2 4NP Start 7:00pm

omahony.mike@gmail.com

Newbourne Observing Group 1st Birthday Meeting

The Newbourne Group met as usual on Monday 14th October with sixteen members attending, a third of whom were ladies!

The weather, as so often happens, was against us with a cloudy overcast sky but in our warm hall the lights were burning brightly, NOG has been going for a year, our first meeting held on Monday 15th October 2012.

On balance we can look back on a successful first year and with the support of you, our members, we can build on this into 2014. We are always open to your ideas and suggestions, this is your club and we want it run to reflect your needs.

There was a birthday cake to slice up and Neil kindly reorganised his diary to be with us to do the honours. Our thanks to Janice for getting us all organised to do this properly and to Lucinda for the two bottles of bubbly! When we came to clearing up all the washing up was done, thanks to you all for mucking in.

Newbourne Open Evening

Saturday 9th November from 5.30pm until about 10pm.

A number of Scout/Guide groups have shown interest and the evening is aimed at anyone with a passing interest in astronomy to whom we can pass on our own enthusiasm for this fascinating hobby. We are advertising in local notice boards and superstores.

It would help our plans enormously if you could let Mike Norris know if you will be attending and if you will be bringing a telescope. If the weather keeps us in the hall we will have an indoor display of equipment and Mike O'Mahony will be giving a short talk. We will be serving hot and cold drinks and snacks.Newbourne, Saturday 9th. November From 5.30pm.

Autumn & Winter – 7pm start

Monday 11th & Thursday 28th November

Monday 9th & Thursday 19th December

OASI

Orwell Astronomical Society (Ipswich)
Charity Registered in England. No 271313.

OPEN EVENING AT NEWBOURNE VILLAGE HALL

http://www.oasi.org.uk

Saturday 9th November
5.30pm to 10.00pm

The Newbourne Observing Group will be holding an open evening on the 9th.November for anyone interested in astronomy. There will be a display of various types of telescopes for visitors to look through (weather permitting*) and members will try to guide you around the night sky.

Thinking of taking up astronomy?

Come along to find out more about our activities and how you can get involved. If you're thinking of buying some equipment for Christmas, you may be surprised at how low cost it can be. We can help you avoid buying unsuitable gear and help you set up and use what you buy.

*If weather is bad the display will be in the hall so still come along!

http://www.newbourne.org.uk/village_hall.htm
The Newbourne Village Hall, Mill Lane Newbourne, IP12 4NP

Kelling Heath Star Party 3–6 October

Mike Norris

Kelling Heath is the largest annual starparty in the UK and this year OASI had an official presence thanks to Mike Norris, Dave Murton, Mike Atkins & Roy Gooding.

Mike & Dave arrived on Friday 4th and having found the pitch battled against a gale to get the tent up. They were saved only at the last moment by a neighbour on the adjoining pitch flinging himself into the fray. Eventually the beast was quelled and after a meal and a pint at the pub to settle nerves, the sky remaining completely overcast, they opted for an early night in case things were to improve later.

It must have been well after 10pm when the plaintive cry Miiiike sent both scuttling from their warm sleeping bags. Mike Atkins had managed to find the tent amongst the hundred or so others that filled Kelling. It was pitch black and he only possessed a non functioning red torch to help him. Celebration bottles were duly opened.

Dave cooked up a sausage hash for breakfast and the morning was spent touring the many pitches looking at all the astronomical equipment on display. Everyone was so helpful and informative. By lunch Roy had arrived completing the quartet. The trade stands were by now in full swing and later the group attended lectures given by members of The Loughton Astronomical Society.

The evening meal was something of a disaster as the pub was fully booked. In the end Roy was transported back to Sheringham so he could catch his train home while Mike, Dave & Mike settled for a long overdue pizza.

Saturday night cleared with a great opportunity for some excellent observing making the whole trip thoroughly worthwhile. Sunday morning was all about packing up but not before Mike Atkins had cooked a fantastic egg and bacon butty.

All in all a great weekend.

Articles for the OASI Newsletter

News, pictures and articles for this newsletter are always welcome.
Please send them to

news@oasi.org.uk

The CLOSING date is the 20th day of the month

if you want your material to be published in the next issue.

Please submit your articles in any of the following formats:-

Text: txt, rtf, rtfd, doc, docx, odt, Pages

Spreadsheets: Excel, OpenOffice/LibreOffice, Numbers

Images: tiff, png, jpg

Schematics: sch (Eagle preferred)

I can extract text and pictures from pdf files but tables can be a bit of a problem so please send these as separate files in one of the above formats.

Thank you for you co-operation.

Paper vs pdf

Eric Sims valiantly prints about 170 copies of the Newsletter 11 times a year. It is a mammoth effort for which we are very grateful and, to reduce the load, I would encourage readers to take the e-version (you can always print it yourself if you have an aversion to tablets and screens). We appreciate that some members are only able to accept the paper version so there are no plans to stop.

The maximum size of a printed newsletter is 32 pages, to avoid the more expensive large letter postage rate, but even this length poses a not inconsiderable printing load and cost.

The e-version can be read by any type of computer (Windows/Mac/Linux) irrespective of its font set and default paper size, can contain lengthier articles, more and bigger pictures and comprise any number of pages.

Martin RH

Electronic newsletter archive

The electronic archive of OASI *Newsletters is* now complete from edition 1 (February 1972) to edition 484 (April 2013) inclusive. (From May 2013 onwards, *Newsletter* production was undertaken electronically and editions are available for download from the OASI Yahoo filestore.) The archive contains a scan of every non-blank page of the *Newsletter* and an index in the form of an Excel spreadsheet. The spreadsheet facilitates locating articles by keyword searches using the Excel *Find* function.

Key statistics of the archive are:

Newsletters archived:	edition 1 to edition 484
Period:	February 1972 – April 2013
Number of scanned pages:	5528
Number of items indexed	12016
Size of archive:	3.2 GB

A DVD containing the archive has been deposited in the OASI library for loan to members. Anybody wanting their own copy, please let me know and I can either provide an additional DVD or load the archive onto a memory stick.

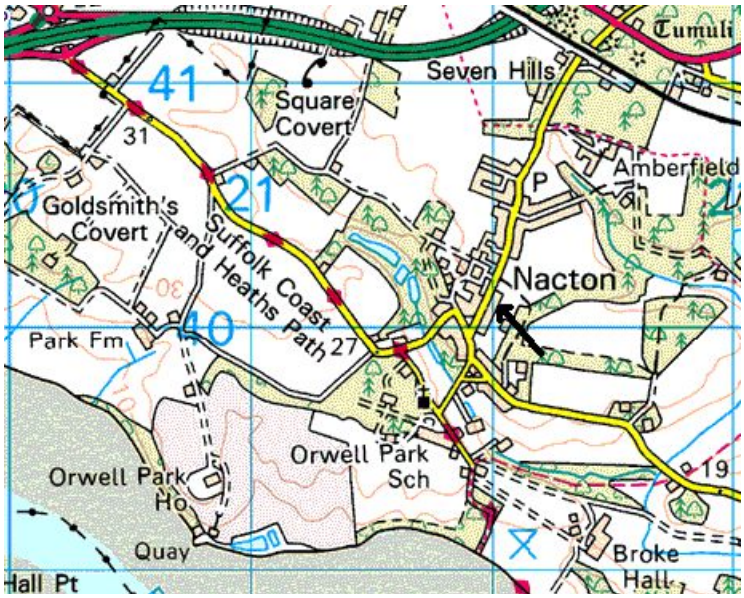
James Appleton

Astronomy Workshops

Doors open at 7:30pm.

Workshops START at 7:45pm

Venue: NACTON VILLAGE HALL IP10 0EU (next to the small village school, just below and left of the N in Nacton on the map).



If you are a new OASI member, or haven't been to one of these informal workshops before, they are a mixture of events of different characters including beginners talks, interactive workshops, films, etc., suitable for all. They are also a chance to chat with other members over a cup of tea and a biscuit, in a venue rather warmer than the observatory dome on a winter's night!

Mike Whybray Workshops organiser [redacted] (Mobile) [redacted] (Home)

Please park on the same side of the road as the hall, but avoid parking on the white lines which mark clear spaces for various driveways and passing places. The police do occasionally check up on this!

Date	Workshop	Run by…
6 Nov	**Ole Rømer And Estimation of the Speed of Light** In 1676, the Danish astronomer Ole Rømer (1644-1710) announced, on the basis of observations of the Galilean satellites of Jupiter, that light had a finite speed. We review his work and describe our efforts to repeat his observations and analysis. We use an innovative scale model to illustrate the dynamics of Jupiter and the Galileans. Our results, although mixed, shed new insight into aspects of Rømer's work, the practical difficulties associated with his approach and the theoretical limitations which constrain its application. We aim to encourage more members of OASI to observe the Galileans and involve themselves in a project to estimate the speed of light.	James Appleton, Martin Cook and Alan Smith
11 Dec	**Astrophotography with a Digital Camera** Aims to show what can be achieved and how to achieve it, using both DSLR's and more basic digital cameras (not webcams or CCD cameras though). Includes demonstrations with the actual equipment.	David Murton and Mike O'Mahony

Diary for November

Small Telescopes Observing Nights at the observatory Paddy O'Sullivan Gerry Pilling Dave Robinson	**STONs** From 8:00pm 4th Nov: Cassiopeia, Andromeda, Pegasus 10th Dec: Pegasus, Triangulum
Observatory Club Nights Observing with the Tomline refractor and other telescopes if skies are clear Martin Cook Roy Gooding	**Wednesdays** From 8:00pm
OASI Members Newbourne Group Newbourne Village Hall, Mill Road, Newbourne. Winter programme – see OASI web site for details	**7pm Newbourne Observing Evenings** Monday 11th & Thurs 28th Saturday 9th Open Evening (see p11) See www.newbourne.org.uk
OASI Workshop Nacton Village Hall Mike Whybray	**Wednesday 6 Nov** Ole Rømer And Estimation of the Speed of Light James Appleton, Martin Cook and Alan Smith
Observatory visits by local community groups Paul Whiting FRAS	07/11/2013 19:00 1st Capel cubs I 14/11/2013 20:00 U3A 26/11/2013 19:30 1st Kesgrave Scouts I 28/11/2013 19:30 1st Kesgrave Scouts II
Committee Meeting Venue: Methodist Church Hall, Blackhorse Lane, Ipswich	TBA
Open Weekend	22 & 23 November

Society Contact details

See page 2 for Committee contact details.

Observatory (meeting nights only)

Email queries: info@oasi.org.uk

Facebook.com/orwell astronomical

Twitter: @OASIpswich

Please send material for the OASI web site and newsletter

e.g. observations, notices of events, general interest articles, to

info@oasi.org.uk