



The CHESTERFIELD ASTRONOMICAL SOCIETY

Newsletter February 2014

CAS website www.chesterfield-as.org.uk

Registered Charity No. 514048

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**Subscriptions - full membership £55
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(All juniors must be accompanied by an adult who must be a fully paid up member).**

Welcome to the February issue of the CAS newsletter

CAS News

Len Curry, a long standing member of our society and a former treasurer for quite a few years, died Wednesday 22nd January 2014, a few months short of his 80th birthday. Due to illness he had not been able to attend meetings for a year or so. The Funeral is to be on Tuesday 4th February at the Chesterfield Crematorium at 3.30pm. There is to be a reception afterwards at the Casa Hotel, which is close by. Anybody who knew Len is most welcome to both.

Our condolences to his wife and family.

There was a lot going on in January so please read on.....

Stargazing Live

Despite the weather we did quite well over the three nights. The first night, Wednesday, was a bit of a washout. It RAINED (heavily)!! We did have a handful of visitors but that was all. The following night, Thursday, was a lovely clear night and we had around 40-50 people turn up. Mark Eustace was doing the lectures and the telescope was in full use. The last night, Friday, was doubled up with our members' night and there were lots of visitors we think around 80-100 even though the weather was not good. It was cloudy and a nasty drizzle set in. We unfortunately could not use the telescope that night, we did open the dome at one point when the rain eased off but had to shut it after only a few minutes as it got heavier again. Because of the weather and not being able to use the telescope we had a bit of a backlog of visitors. The dome was full of people, so was the lecture room and we had another crowd outside, in the rain, waiting for the next show but hopefully everyone at least got to have a talk in the dome and the lecture room.

Many thanks to all the helpers, to Mark for doing the talks, to Mario and Rob and anybody else who helped on the nights. We made just short of £200 which will go towards the renovation of the car park which is our next project.

Stargazing Live at Leicester University - *From Rob McGregor*

It was that time of year again, and Dr Tracey Dickens of Leicester University, remembering our involvement last year, invited the Society to set up a display again for their "Stargazing Live" event on Wednesday 8th Jan.

Four of us went, Geoff Fell, Johns Bardwell and Brown and myself. We met up at the observatory, collected some display items, and set off to get there for 2pm (we had been promised car parking close to the student's union which was to act as the exhibition hall). We got there at about 2.10pm – not too late!

Unfortunately we were directed to a car park well away from the exhibition hall. We wandered around trying to find where we were meant to set up, and were directed from the student's union reception to the campus receptionist in another building, who had no clue where we were meant

to be. Eventually we found our display room was right next to the student's union reception after all! The time was now three o'clock! However we were the first Society to arrive (Nottingham and Leicester AS's had also got lost on the campus) so we had our pick of the tables.

We soon set up – we had taken our own personal telescopes, the radio telescope (meteor detector), lunar module, display board, and a newly refurbished model of Jupiter, Mars, Earth and Moon, complete with a thoroughly washed blow up Sun.

As we put the finishing touches to our display, "The Sky at Night"s Paul Abel (who works at the Uni) came in to greet us. He seemed very interested in my Dob Scope, and we had a chinwag about it and our shared abhorrence of Barlow lenses. It seems also that he had been to the Chesterfield area before and John Bardwell and he chatted about the steam engines at Barrow Hill. He even expressed an interest to visit CAS! Meanwhile the other Societies had arrived and were setting up.

The weather was so poor outside (just like last year) that there was no chance of real astronomy. Instead we had to set the scopes looking at anything that they could focus on. I set the Dob and my little blue scope looking through the foyer out of the glass doors to the building opposite. Geoff had his scope focussed on a ceiling light. The other Societies had webcams on their scopes that were trained onto photos of celestial objects – very convincing too!

The visitors flooded in. The kids loved to look though the scopes at anything; it didn't seem to matter that there was nothing in the sky to view! They seemed very interested in the scale models of solar system objects.

Paul Abel came back and told us that BBC's East Midlands Today would be broadcasting from the event, and asked if the crew could use my small blue scope as a prop. Could this be our 5 minutes of fame? The presenter and cameras came into the room and started filming but kept noticeably distant from us.

Richard Westwood turned up, thoroughly wet through with the rain, so John Brown took him to get a cup of coffee. I wandered off to have a look at some of the other exhibits, which included displays from the National Space Centre. They had bought some radio controlled "Martian Rovers" for the children to try out. Time passed and the numbers of visitors dwindled. Finally at 9pm, it was time to pack away. All over for another year!

When I got home, I watched East Midlands Today on BBC Iplayer. Unfortunately we did not appear; in fact there was not even a hint that we were there! Never mind, there's always next year!

Channel 5's Gadget Show at Arbor Low Stone Circle 11 Jan. – From Rob McGregor

Mark Eustace and I went along to help a freelance photographer set up some scopes The Gadget Show were reviewing, so he could get some shots of astronomical objects through them for broadcast. There were no TV cameras, only DSLRs, some taking timelapse photos of the clouds and the Moon. The Magic of television! The show will be broadcast on the 10th March.

(one photo from that event)



Sidewalk Astronomy at the Donut Car Park, Chesterfield for the BBC. (Some photos from that event)



Thank you to those members who went to Leicester University, taking part in the Chanel 5 Gadget Show review and for the sidewalk astronomy in Chesterfield.

Good work guys!!

Christmas Party – Friday 17th

I have never seen so much food! I don't know what happened to it all maybe some of you will not need to pack up for work for the next month! We had more visitors and we were asking them to help out with the food which I think some of them did.

Many thanks once again to Jim Fisher for his challenging quiz and congratulations to Geoff Fell and his wife for winning! Well done.

Reminders.....

Don't forget if you are ordering from Amazon please do it through our website. Mark McKeown has kindly set up the link to follow – this earns us commission!!

<http://www.chesterfield-as.org.uk/>

Astro-camp at Haddon Grove – 28th – 30th March (Friday to Sunday)

Another reminder for the astro-camp in March. If you are interested and/or you need to borrow some equipment please contact Peter at peterdavison45@virginmedia.com and he will bring the equipment up the Observatory the week before.

Type 1 Supernova in M82

M82

This is sent from Peter Davidson:-

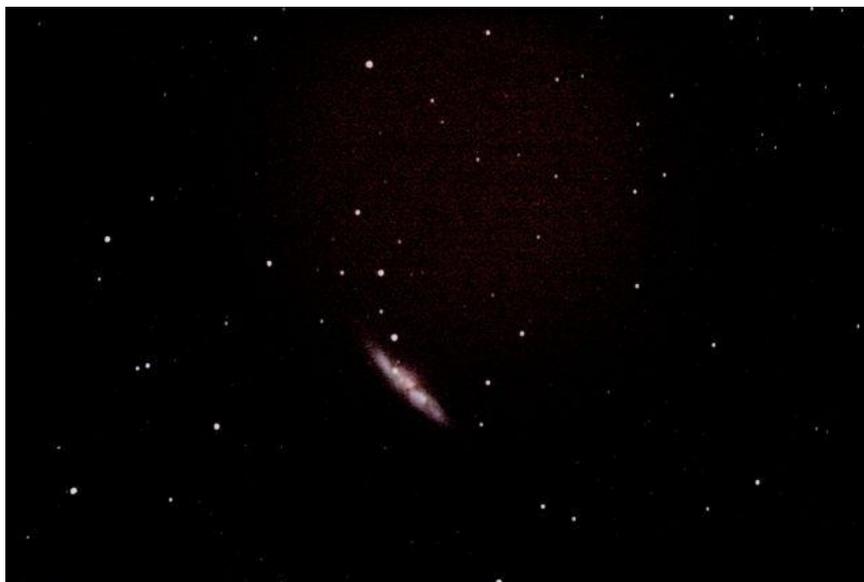
“It was reported on Jan 21st that a type 1a supernova had been observed in M82, so when I went down to Graham Jenkinson's house on Saturday. When we had a look at it and through the eyepiece you could see a bright star about a third of the way into the galaxy.

One of the pictures is of the galaxy that I took a few years ago using the society's 18" telescope and the other picture was taken using Graham's 12" telescope which shows the supernova”.

M82 Supernova



These are from Graham Jenkinson-





My efforts at photographing the supernova in m82. They were taken with my 12 inch f6 jenkoscope.

Many thanks for these Peter and Graham, nice work gentleman!!

Solar viewing

On Saturday afternoons between 1:00 pm and 3:00 pm (weather permitting!) we use the solar scope to do some observing of the sun. It is very active at the moment and many prominences, filaments and sun spots can be seen. It is best to check on a Friday night though that this is going ahead for the following day.

Things to look for in February

Saturday 1st Just after sunset look for mag. -0.3 Mercury low in the southwest.

Also on the same day Ganymede will transit Jupiter. The moon crosses the planet at 19.33 and exits at 22.42. Its shadow can be seen in transit between 22.10 on the 1st and 01.22 on the 2nd.

Tuesday 4th If you fancy an early morning you may get a chance to spot three comets brighter than mag. +12.0, C/2013 R1 Lovejoy, C/2012 X1 Linear and C/2012 K1 Panstarrs.

- Thursday 6th Callisto, the outermost Galilean moon, passes in front of Jupiter's disc in the early hours. The transit event starts at 02:12 and ends at 05:35.
- Saturday 8th Again Ganymede transits Jupiter's disc from 22:50 to 02:06 on the 9th. Its shadow begins to transit just as the moon moves off the disc and remains visible until 05:23.
- Wednesday 12th Ganymede can be seen emerging from Jupiter's shadow at 19:22. Observe from 19:15 and look approximately one Jupiter width to the east of the planet.
- Friday 14th It is Callisto's turn to emerge from Jupiter's shadow this evening. Start looking two Jupiter widths to the east of the planet from about 19:45 and the moon should reappear at 20:05.
- Wednesday 19th The waning gibbous moon (76% lit), Mag. -0.2 Mars and mag. +1.0 Spica form a triangle in the southeast around midnight.
- Saturday 22nd Callisto transits Jupiter's disc once again starting at 17:34 in daylight and leaves the disc at 20:58.

Jupiter is still in prime position and best time to observe is on the 1st at 22:00 at an altitude of 60°.

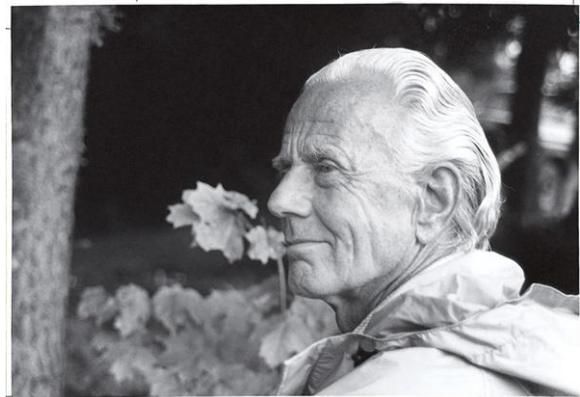
Mars is currently a morning object located in Virgo and the best time in February is on 28th at 03:30 at an altitude of 29°.

ASTROSTUFF

John Dobson dies

John Dobson revolutionised the hobby with his alt-azimuth mount for reflecting telescopes and his efforts in sidewalk astronomy and revolutionised amateur astronomy. He passed away January 15, 2014, at age 94.

He is best known for inventing a revolutionary mount for reflecting telescopes. Now known as the Dobsonian mount, it is an alt-azimuth assembly that is both simple and inexpensive to build. And although he also taught telescope making — including how to grind and polish mirrors — the benchmark moment came when he devised the mount.



During the past four decades, uncounted thousands of observers have John Dobson to thank for letting them enjoy views of the heavens through larger (and often much larger) telescopes than they could have afforded prior to his invention.

John Dobson was always willing to help a fellow amateur astronomer. He was an expert in grinding mirrors and making telescopes and mounts.

He was born September 14, 1915, in Beijing, China, where his maternal grandfather had founded Peking University in 1898. The family moved to San Francisco in 1927. He graduated from the University of California, Berkeley, with a master's degree in chemistry. Afterwards he worked in the corporate arena for only a year.

In 1944, he joined the city's Vedanta Society monastery. There, he spent 23 years as a monk of the Ramakrishna Order. He saw one of his tasks as reconciling astronomy with the society's teachings and built his first telescope — a 2-inch refractor — in 1956. He used a lens he purchased in a junk store and an eyepiece from old binoculars. Through it he saw the rings of Saturn. One of his fellow monks mentioned that it was possible to grind a mirror and construct a reflecting telescope. Dobson quickly made his first mirror out of a 12-inch piece of porthole glass from a marine salvage yard. When he looked at the last quarter Moon through his finished scope, he was surprised and deeply moved by what he saw. His first thought was, "Everybody's got to see this."

Dobson interacted with thousands of owners of Dobsonian-mounted telescopes. He had a kind word and a bit of advice for every one of them.

In 1958, the order transferred Dobson to the monastery in Sacramento. He made numerous telescopes there, the first being a 5 inch reflector.

He left the monastery in 1967, hitchhiked back to San Francisco, and co-founded the SFSA (San Francisco Sidewalk Astronomers) the next year with two of his students, Bruce Sams and Jeff Roloff. In lieu of formal membership meetings, club members would set up telescopes on the city sidewalk for passersby to view the heavens and learn more about astronomy.



Over time, original members of the group left the area and founded other astronomy clubs throughout the United States. And although the original chapter and some newer ones have kept their city designations, the group renamed itself the Sidewalk Astronomers in 1976. You can visit the organisation's website at www.sidewalkastronomers.us.

On March 8, in honour of John Dobson, the Sidewalk Astronomers will dedicate this year's International Sidewalk Astronomy Night to his memory. Amateur astronomers around the globe can join in and celebrate Dobson's life and continue to carry the torch that he lit back in 1968.

FUN STUFF

The Ten Twelve Commandments for Amateur Astronomers:

Thou shalt have no white light before thee, behind thee, or to the side of thee whilst sharing the night sky with thy fellow stargazers.

Thou shalt not love thy telescope more than thy spouse or thy children; as much as, maybe, but not more.

Thou shalt not covet thy neighbour's telescope, unless it exceeds in aperture or electronics twice that of thy wildest dreams.

Thou shalt not read "Astronomy" or "Sky & Telescope" on company time, for thine employer makes it possible to continue thine astronomical hobby.

Thou shalt have at least two telescopes so as to keep thy spouse interested when the same accompanies thee under the night sky or on eclipse expeditions.

Thou shalt not allow either thy sons or thy daughters to get married during the Holy Days of Starfest.

Thou shalt not reveal to thy spouse the true cost of thy telescope collection; only the individual components and that shall be done with great infrequency.

Thou shalt not buy thy spouse any lenses, filters, dew shields, maps, charts, or any other necessities for Christmas, anniversaries, or birthdays unless thy spouse needs them for their own telescope.

Thou shalt not deceive thy spouse into thinking that you are taking them for a romantic Saturday night drive when indeed thou art heading for a dark sky site.

Thou shalt not store thy telescope in thy living room, dining room, or bedroom, lest thou be sleeping with it full time.

Verily, observe not through thy neighbour's AP or Tak, lest thee be utterly consumed by the lust of apo-fever, and thy brain and thy bank account shall shrivel and wither like branches in a flame.

Verily, observe not through thy neighbour's Dob of Goliath, lest thee be lain bare to the fires of aperture-fever, and thy sanity, and thy life savings be crushed as the grapes of wrath.

That's all folks.

Sue



This newsletter is sent out to all present members without whom the Society could not survive. Also to previous members and people with an interest in astronomy in the hope that they may wish to join/re-join the Society.

If you no longer wish to receive this newsletter by e-mail please let us know. Thank you.