

PEDERATION OF ASTRONOMICAL SOCIETIES

JULY CONVENTION IN SHEFFIELD

This is the line notice so members a book now via Ken Marcus. Booking is advised, particularly if the meal is

Sheffield - the Physics Block. ORGANISER: Paul Harper, 62 Kingston

remited.

0484 25988

at same price.

The preliminary notice of this meeting has already been circulated to societies.

This is the final notice so members should

DATE: 1989 July 8 Saturday

Average, Dalton, Huddersfield HD5 9HL: Tel

ENTRANCE CHARGE: £2.50 for FAS society

WRITE NOW FOR TICKETS AND PAYING FOR ANY

MEALS AT THE SAME TIME, TO KEN MARCUS, ADDRESS AROVE. MEALS MUST BE PAID IN

members and f3 50 for non-members MEAL: Ploughmans Lunch £3.70; please state whether vegetarian ploughmans is required

EDITOR: Rosemery Navlor. 256 Bacup Road. TODMORDEN. Lancachine 01.14 7H.1 Tel: 0706 817767

TREASURER: Ken Marcus, 5 Cedars Gardens, BRIGHTON BN1 6YD Tel: 0273 556265

SECRETARY: Christine Sheldon, "Whitehaven", Maytree Road, Lower Mcor, PERSHORE, Worcs WR10 2NY Tel: 0386 860202

issue number 19

Federation of Astronomical Societies

FEDERATION NEMAS

DDOO'D AVANT.

- 10.00 Coffee
 10.45 FRRTHER EXPLORATION OF MARS Les
 Weeliscroft of Sheffield University
 11.45 ROBOTIC TELESCOPES Dr Baruch of
 Leeds University 10 00 Coffee
- 12.45 Linch
- 2.00 ORIGIN AND EVOLUTION OF THE SOLAR SYSTEM Professor Woolfson of Vork University
- Tea/Coffee COSMIC GAMMA RAYS - Dr Hillas of
- Teeds University
- 4 25 FAS Notices and thanks.

TRADE STANDS ARE INVITED - please contact the organiser. There will be plenty of room for exhibitions so feel free to bring dieplay materials but again contact the organiser first.

The University has an astrophysics department and a long history of helpful association with astronomical societies in the region so a warm welcome can be expected

Our thanks to the University for their

THE AUST THEODRASTION .

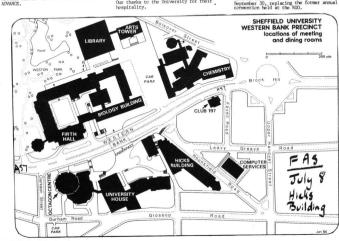
unlead).

The University occupies ground on both sides of Western Bank, a dual carriageway to the west of the city. It is reached from Brook Hill roundabout. A map can be obtained from the organisers when booking. Car parking is available to the north side of the dual carriage and an underpass takes pedestrians to the Hicks Building to the south. To drive directly to the Hicks building take Upper Hanover Street and Hownefield Road from the Brook Hill roundabout. (For those with materials to

By train - 2.5 hours from London: 1 hour from Leeds or Manchester. The No 60 bus direct to the University, one mile away. catching the bus is advisable if coming by train

The University is on the following bus routes: 2, 50, 51, 52, 60 and 95.

News and articles for the Newsletter Issue No 20 should be with the editor by late July please. Publication due August with news of next FAS Convention in Cardiff, September 30, replacing the former annual convention held at the RGO.



Questions will be set by Mark Benton and Nigel Palmer. Each competing society to At the AGM held in Coventry on Saturday Third prize of £25 to West of London the quiz enters one candidate to represent May 6 the following officers were elected Astronomical Society. them in a Mastermind-style brainstorming to serve for the year 1989/90:session. The organisers promise a buffet The judging was done by Ron Arbour in the and bar and are considering inviting a photography section and Arthur Gilbert in President: Rosemary Naylor Vice President: Bob Owens speaker to add to the programme. Make a the artistic sections.
The number of members in each competing note of the date and look for more details Secretary: Chris Sheldon Assistant Secretary: Tony Ireland society was taken into account and societies were judged anonymously. It was Treasurer: Ken Marcus only as the results were being announced that society names were revealed. Nigel Palmer, 33 Macri Avenue Editor: Rosemary Naylor Bolton-on-Dearne, Rotherham, Education Secretary: Eric Zucker Society News Editor: Martin Chick South Yorkshire S63 8DZ The judges had found the competition a Assistant Society Editor: Pam Chick very close run thing with non-winners being such worthy entrants that it was LIVERPOOL AS/NORTH WEST ASTRONOMICAL Publicity Officer: Dave Powell Editor of Handbook: Brian Jone Editor Council Newsletter: Bil Brian Jones Bill afterwards decided by the Council that the runners-up; Bristol Astronomical Society and Plymouth Astronomical Society should Liverpool AS are to host the North West O'Shaughnessy Astronomical Societies meeting on Saturday October 21. This takes place at Liverpool City Museum & Planetarium between 10am and Meetings Co-ordinator: Paul Money be given £10 each out of FAS funds. The new list of officers will appear in the 1990 FAS Handbook, meanwhile most addresses can be found in the old list on 5pm. Societies wishing to attend should contact Gerard Gilligan on 051-220 8718 The Federation is extremely grateful to SPACEPRINTS of 117a High Street, Norton, Stockton on Tees, Cleveland TS20 1AA for page 37 of the 1989 Handbook, Exceptions after 6pm. More details of the meeting will be available nearer the time. their generosity. Their free colour catalogue can be LIVERPOOL AS/BRITISH ASTRONOMICAL Dave Powell, 1 Tal-y-Bont Road, Ely, Cardiff, CF5 5EU obtained from this address showing their ACCOUNTATION range of products, which will hopefully include some of the material submitted in Paul Money, Valley Cottage, Winceby, Horncastle, Lincs, LN9 6PB Liverpool AS have a meeting well in hand the competition in the near future. to be held next year; September 14/15 1990 as part of the BAA Centenary celebrations 1890-1990. The City Museum has been booked. One of the judges, Arthur Gilbert, is an international space artist and would like to encourage our members to do more painting of space scenes. His letter is printed elsewhere in the Newsletter. The treasurer presented his report for the year to 30 April 1989 which showed that The Astronomer Royal, Professor Sir Francis Graham-Smith will be guest speaker while our expenses were slightly higher at the public lecture which ends the proceedings. More details next year from Liverpool AS secretary: than in the previous year, our income had fallen slightly. Moreover we no longer have our October convention at The conclusion reached by Ron Arbour. after seeing the quality of the photographic entries submitted, was that Herstmonceux to look forward to as a Gerard Gilligan, 85 Steers Croft, Cantrill Farm, Liverpool, Merseyside L28 8AH source of income. Nevertheless he felt standards have improved dramatically. He that there was no need to raise subscription rates and these will remain said that at one time British LINCOLN AS astrophotographers were some 10 or 15 the same at £7.50 standard rate for societies with 25 or more members and ASTRONOMY AND SPACE '89 years behind achieving the quality demonstrated by American £4.00 for smaller societies. Celebrating the 30th anniversary of the Lincoln Society, a meeting is to be held astrophotographers but now they are Subscriptions become due in September. Societies not present at the AGM may experimenting with considerable success. He cited the 'grotty' conditions with which our amateurs had to contend as the on Saturday September 23 from 10am to 6pm.
Speakers will include:
Neville Kidger; "Soviets in Space"
Neil Bone: "Meteors"
Alan Wells; "Lunar Occultations with obtain copies of the statement of accounts from the treasurer if they wish to study driving force. The answer to the problem the details. was being found in short exposures on fast film, so that now our photographers are automated telescopes' There was the usual interactive discussion between members from the floor and council catching up with the rest of the world. Ron Maddison; "The next generation of Super Telescopes' members on a range of topics from education to future conventions. "The Everglades", 13 Reaufort Close, Nettleham Park, Lincoln LN2 4SF Speakers at the Convention which followed Pam Chick asked societies to take note of the AGM were well received and provoked Tel evenings 0522 531591 their present address when sending society news for inclusion in the FAS Newsletter's considerable discussion. They were: Round-Up. It seems some societies have John Fletcher on "Astrophotography". Joh will feature in the film "Earth calling Basingstoke" to be shown on Channel 4 TV "FARTH CALLING BASINGSTOKE" still not updated their mailing lists although it is over a year since Mr & Mrs Chick moved to: late hely If you want the general TV-watching public Bernard Abrams on "Supernovae". Bernard to tune into a programme about the strange 2 Magnolia Way, Chandler's Reach, Llantwit Fardre, Nr Pontypridd, Mid Glamorgan CF38 2NJ is author of a book to be published by Stanley Thornes shortly to be used by habits of those nocturnal creatures, manager astronomers, you give it an equally strange title. This seems to be the thinking of a team of film makers who students of astronomy at schools level. Norman Walker spoke on the opportunities are currently putting together a film for Federation Sweatshirts and Teeshirts, as which amateur astronomers have to make useful contributions to observational showing on Channel 4. To see the results, you should tune in yourselves to Equinox, advertised in the last FAS Newsletter were not proving to be the best seller which Chris Shelden had hoped when she astronomy, particularly in the field of photoelectric photometry. Norman is co-author of the book "Getting the Measure of the Stars" by Alan Cooper and Norman Walker, just published by Adam Hilger. Channel 4 TV, Sunday July 30 at 7.30 pm.
A number of FAS members will be featured.
The programme will run for 50 minutes and investigated marketing these as publicity for the FAS. The scheme to have filming took place in various locations in the UK during April this year. The sweatshirts and teeshirts printed with our logo does depend on quantity to achieve reasonable prices. So, if you had planned to order garments, please do so as soon as possible so that we can assess the Basingstoke of the title obviously refers to Guy Hurst of The Astronomer network. FAS members taking part include John Fletcher of Cotswolds AS, David Graham of viability of the enterprise. FITTURE MEETINGS Darlington AS and a certain woman trying

RADIO LEEDS ASTROMIND

The annual meeting held by the Yorkshire

contest for the cup originally donated by Radio Leeds will take place on <u>Saturday</u> October 21, Last year's winners,

the 1989 meeting and to set the questions.

October 21. Last year's winners, Mexborough and Swinton, offered to host

Group in which astronomical societies their brains against one another in this

SPACEPRINTS COMPETITION

were

Societies submitting mamerial to be judged

at the AGM and Convention were few but the quality of items presented was high according to the judges. The winners

First prize of £75 to Cotswolds Astronomical Society.

to explain why there are so few women in astronomy. It is difficult to say at this

stage what the result will be since 90% of what has been filmed will be edited out.

as is normal with these things, but that still leaves one of us quite apprehensive.

Still, it was an interesting experience. Don't miss it, and if anyone would care to

send in a review afterwards for publication in the Newsletter, please feel free to do so. (The most complimentary

review will probably get printed).

Astronomical Society.

ALLANYAVI. The Editor has received copies of a brochure for the above centre in Portugal from the West of London AS. No doubt other societies will have received copies

West of London members think it scunds promising and are considering

booking a holiday. If it sounds tempting and you haven't received the brochures.

then read on.

The literature is in English and the centre is run by a resident English ccuple. They are Dr and Mrs Ewen-Smith. Dr Bev Ewen-Smith is a Manchester University physics graduate and an amateur astronomer of long-standing. His wife Janet will look after the needs of family visitors at the Centre.

Portimac, in the Algave, is on the coast. Travel by air is recommended to Faro airport. Rates are given as £10 for bed and breakfast with a discount for astronomical society members. Evening meal if required is £4.00

COAA is an informal study centre at latitude 37 degrees north. Omega Centauri, the globular cluster is a fine sight and Canopus is on the southern limit of visibility. The Centre is being equipped with optical instruments, including a new 12-inch Newtonian reflector and a 4-inch refractor.

computing facilities are available. Booking forms and further information can be obtained from the address below:

Dr and Mrs Ewen-Smith Centro de Observacao Astronomica No Algave Casa Adelina, Poio, Mexilhoeira Grande 8500 Portimac, PORTUGAL

IN THE SKY

the books.

THE LASER LIGHT SHOW OF 1989 MARCH 12/13 Pon Arbour The aurorae as seen over Hampshire was

breathtaking, covering almost all of the sky, reaching to within a few degrees of the southern horizon. In thirty years of observing, this was an unparalleled experience, being so spectacular, and yet with knowing it might stop abruptly, no observing notes were taken. While Pat (Mrs Arbour) rang round other observers to alert them to the show, the auroral display continued. In fact, with only momentary breaks, it lasted virtually continuously from 7.15pm to lam.

One can read about the different types of aurorae in the books. All the types were displayed that night. The most spectacular part was the coronal streamers overhead when everything turned bright red, with the streamers pulsating rapidly. This was obviously better than anything to be seen in the photographs taken from Sweden and Norway which can be found in

At times the northern horizon was an ice blue with calm periods of pale blue which made the moon look insignificant. At

times the sky seemed as bright as day. During an apparent break in the display, when it seemed that supernova patrol photographs might be possible, there was obviously still considerable activity going on, for next day, when the film was developed, the negatives were dead black,

ie completely fogged out. I shall certainly watch out for future auroral displays.

BOOK REVIEW

beginner; David H Levy

OBSERVING VARIABLE STARS A Guide for the Cambridge University Press 1989 pp198 RU Lupi? Could you take such apparently

Mereor warchers with his own radio

Editor can then be forwarded to the

meteors. Please make an effort to observe

co-ordinator's address. Please try to join in at whatever level you feel able.

the Perseid shower in August, making the usual notes. A copy sent to the FAS

NU Luppi Could you take such apparently personal questioning from a fellow astronomer? David Levy the author may say, "Probably" as he does in section 20 of this new guide aimed at the total beginner. (The variable star RU Lupi is an irregular, eruptive star in the area of a diffuse nebula in the constellation of the Wolf). For the beginner to astronomy this is a book which is highly readable but if you have successfully observed variables, it is not for you.

Some important statements from the book highlight the style it is written in, ie interest you in the observation of variable stars it is not filled with graphs and formulae as explanations of graphs and formulae as explanations of variation." It is written ".. to inspire you to observe variable stars." Levy's writings ask you to ".. share (his) enthusiasm for the starry sky." It will be undoubtedly successful at fulfilling these desires or wishes; it may nurture a few amateurs to become serious observers or professional astronomers. The author is an American comet discoverer, keen is an American Comet Discoverer, keen variable star observer, and an author with wide interests which also includes writing for "Astronomy" and "Sky & Telescope". He especially likes teaching children.

importance is described. There are about 20 AAVSO charts which, despite their small reproduction, may help the raw beginner. These charts cover variables such as; Z Cam, T CrB, R Leo, R Sct and T Tau. Scme 320 nover normalists. 320 more variables over the whole celestial sphere are shown on basic maps as suggested objects for observation. few sentences describe most of these stars. There are few, if any, comparison stars on these maps (these maps could have been drawn better) and Levy justs

The wide range of variable star is simply explained and their observation and

points approximately in the direction of the variables. You will need a good star atlas and observational experience to find some of the fainter stars. The author suggests that proper charts may be obtained from a major v.s. organisation. The book is basically good at its intended aims, yet there are some areas which are lacking in thoroughness, in particular the instrumental and observer requirement's sections. There are some flaws and

typographical faults and some errors of fact occur. For example, the absolute tact occur. For example, the absolute magnitudes of S Dor and Sirius are incorrect. Also, beware the table of decimals of a day, the Greek alphabet, the index, and to a lesser degree the constellation list, which is incomplete.

Levy's book could have been better structured so that it was more amenable to a novice observer enthusiastically observing variables, for this is the person it is aimed at. But then it would have to be called a "manual"!

Melvyn Taylor Vice President and joint Editor Leeds Astronomical Society British Astronomical Association VSS Secretary and member AAVSO

In place of the Herstmonceux meeting,

FAS CONVENTION, AUTUMN 1989

Martin Chick is organising a convention at Martin Chick is organising a convention at Cardiff University. Astronomers at this University are amongst the country's leading researchers in the field, and though they do not have a castle to offer, indications are that this will be a prestige meeting. Please make a note of the date and expect

full details later:

FAS at Cardiff: Friday September 29 and Saturday September 30.

LETTER TO THE EDITOR ****

Dear Rosemary

I would like to thank everyone for allowing me to come along to your AGM of May 6 in Coventry and to act as judge in the Artistic Impressions section of your Spaceprints competition. I must add I was most impressed with the standard of entries and found it quite difficult to mark one against another.

'Space Art' has the advantage of bringing to the attention of the general public the subject of astronomy in an easily understood and appealing way. If you feel you have the talent, why not exhibit locally? It is quite possible that some young mind could be awakened to the subject by wour work.

If anyone is interested further in Space ar myone is interested further in Space Art or the International Association of Astronomical Artists, of which I am a member, then further details can be obtained by writing to me at the address below. You do not have to be an artist to join as there are 3 levels of membership together with newsletters, exhibitions and other events.

Best wishes to all

Arthur Gilbert, 2 Rowland Court Alfreton, Derbyshire DE5 7DZ

OBSERVATOIRE ASTRONOMIQUE ANIANE

The French Association for Astronomy is organising an international meeting at the Observatory of Aniane on the French Mediterranean coast near Montpellier.

The meeting runs from September 20 to 23 and is entitled "Le Ciel et l'Espace" The theme is to be education, research, space exploration and the future of astronomical research. The meeting is supported by the above observatory, the European Communities Commission, the European Space Agency and the European Southern Observatory.

The meeting will be attended by professional astronomers, members of

information can be obtained from:

astronomical societies, space industrialists and the general public.

The official languages to be used at the Colloquium are French and English. More

Bornard Pelleguer Observatoire D'Aniane 8P 14 34150 Aniane Herault

France

AYLESBURY AS: In March Dai Jones described of the major characteries ATPITE of the major observatories. These Observatory, the Very Large Array in New Mexico and the Multiple Mirror Telescope in Turson where the University hold mublic in Tucson where the University hold public viewing sessions. These are rarely carcelled because of had weather. Back in the IK of the 52 society observing sessions planned, only 31% were successful, the best months being Sentember and October and the worst January and June BASSETLAW AS: The magazine has started a mombers, beginning with the treasurer. members, beginning with the treasurer, Peter Whyles. Several new members were recruited following a successful Mars watch in October. The Society was also watch in October. The Society was publicised through exhibitions and displays at local events. Social events walk, the annual Christmas muiz and dinner, and a nea and nie sunner with BOSTON ASTRONOMERS: Neil Bone was talking on atmospheric phenomena at the March 13 efterwards the spectacular auroral display seen across the country that meeting on astrophotography at the

10-inch, partly illustrated with his own video. In May, Peter Rea gave an audio visual presentation. A visit to Bradford

Imax Cinema was also made. BRITISH AFROSPACE AS: At their Christmas Greenwood, of Condor Brow Observatory described its building and the 'amateur' work now undertaken including the supernova search and double star work. A buffer followed. The Messier League, one wear on, is proving popular with members. BRIGHTON AS: At the December meeting. Squadron Leader David Bradwell, RAE Farnborough, spoke on the human aspects of

Farnborough, spoke on the human aspects of space flight. In February, Martin Radcliffe, Armagh Planetarium, spoke on the history of the discovery of the Milky Way, and of its structure. In March, Dr Way, and of its structure. In March, Dr Allan Chapman, Oxford, spoke with enthusiasm on Airey and the Greenwich Observatory. The end of session food and wine meeting was in fancy dress celebrating the French Revolution. CARDIFF AS: Rob Moseley, Coventry & Warwicks AS, described his fascination for double stars and how this lead him to undertake measurements of these stars so that results will be available for astronomers to consult in hundreds of

years time. Future plans include a skittles night and buffet and a car treasure hunt. COTSWOLDS AS: Member Andy Packer, a student of astronomy at St Andrews University, spent a working summer holiday at the Anglo-Australian Observatory. John Fletcher spent a winter holiday at St Andrews with Andy, using telescopes there.
At Mount Tuffley members contributed talks in April; Eric Dedds spoke on James Bradley, third Astronomer Royal, John Fletcher reviewed star atlases and charts, Fred Watkins showed slides taken using a scotch mount, Ken and Chris Sheldon took photos of members, developed them and showed them on the OHP, Dick Warden and Peter Cadogan spoke about computers and Les Stephens on his work with variable

COVENIRY & WARWICKS AS: Vaughan Cooper regularly has detailed drawings of his

observations of lunar craters in the magazine. Ian Clark, whose drawing featured in the magazine, has had one of his Mars observations accepted for publication in the American magazine ELY AS: Work at the new observatory site at Wentworth progresses and a barbecue and meteor watch will be held in August as their opening night. Guest speakers have Neil Bone on "Astrobiology" and David Early on "Astrophotography". AS OF HARINGEY: Greg Smye-Rumsby kept the society swake recruiting volunteers to help with demonstrations as he snoke about Neptune. Conrad Malin-Smith demonstrated his camera platform designed to travel to

La Palma and to survive the windy mountain top of La Roque de los Muchachos. Jim Webb, Alan Snell and Bob Butler gave a demonstration lecture "Foucault to do with lasers" Bricks supported the mirrors which were tested with lasers and lenses. Several amateur and professionally made mirrors were tested and the latter were not always the best LEEDS AS: Meetings for the summer include LEEDS AS: Meetings for the summer include Neil Rome on "Atmospheric Phenomena", Dr John Baruch on "Automatic Telescopes" and Stan Bell on "The Length of Day". The society will visit the Liverpool Museum

and Planetarium, combining a planetarium show and a look at the Liverpool AS's

LINCOLN AS: This Society will celebrate their 40th birthday with an "Astronomy and

Space '89" exhibition and meeting on

observatory and telescopes.

Saturday September 23. The programme includes several well-known sneakers. trade stands, space art originals, refreshments and an open evening at the Society's Observatory. LIVERPOOL AS: In March the Society visited Southport AS' Observatory, Hesketh Park, Jupiter and many galaxies and nebulae were viewed through the 6-inch Cooke refractor, which is in good condition there. The fourth young astronomers day, held in April, was visited by 60 young people. There is a waiting list of 250 young visitors to this event. Fric Strach demonstrated his solar hydrogen alpha equipment so that live monitor. The magazine shows Eric's excellent sunspot drawings. In February, a weekend of astronomical entertainments was organised in Croxteth Country Park. The public were treated to informal talks. displays of computers and videos and observing sessions were possible on two of the three nights. Attendance was 600 so

this may become a regular event. NELSON AS: Ten members visited the Howards Club meeting where several people applied to join the Nelson Society. The meeting featured slide shows and a talk by Dr John Mason. The Nelson AS is a new society, meeting in Portchester. Sever members have telescopes and a start has been made to build an 8-inch Dobsonian. In March six members visited the London University Observatory at Mill Hill and observed the Orion Nebula through the 6-inch Cooke refractor. They also saw the 24-inch refractor with its 18-inch guiding scope and 6-inch finder.

stones there as continual sea fog

Llantwit Fardre, Nr Pontypridd, Mid Glam

ORWELL AS: The Society has an annual excursion to the north of Scotland hopefully to view the Aurora Borealis. Please get your news to Pam and Martin by The Summer 1988 visit to the Orkneys mid July so that the next FAS Newsletter turned into observations of the standing can come out in August in time for more news of the FAS Cardiff meeting on prevented them from seeing the sky. Not deterred, three members returned to the September 30.

but on the

snow, but on the

LOOK DIGHT TOWN KINW

PLYMOUTH AS: Dr Percy Seymour hosted the

planetarium where he showed the sky as it

solobrations continued in February with

celebrations continued in February with solar observing from the Place de Brest stone circle followed by a party. A ne site is being sought for the 24-inch telescope. It is planned to visit the

Hampshire Group where the formal meering

president, Robin Gorman. He spoke on astronomy in Hammshire. The mer in April

was followed by a talk by Hampshire's

SATFORD AS: Dr Allan Chapman gave the

Christmes lecture. It is planned to visit

meteorological station and later to visit

SCOTTISH ASTRONOMERS GROUP: The theme of the Anril meeting was observing the sun:

Dr Alaster Simmons giving the main talk on

SE KENT AS: Andrew Hartridge who monitors

radio observations of meteors has built a

drainpipe, an aluminium bar and receiver.
The signal feeds straight onto a computer
so that 24 hour observations are logged.

The Society heard a talk by Mike Maunder

followed. The annual dinner was held in

SW HERIS AS: At the February meeting two British Petroleum films were shown; "This Earth. the search within" explaining geological surveys for minerals and "This Earth .the inheritance" describing the origin and structure of the Earth. In

March, Seymour Laxon, a research student at University College London, spoke on

remote sensing from satellites, with special reference to monitoring climatic changes

WEST OF LONDON AS: The annual observing

accompdarionand observed successfully on

include a members session where equipment,

eminment sold or exchanged if required.

W YORKSHIRE AS: In March Rosemary Naylor gave a talk "Starlight". Other events included observing and a quiz. A jumble sale will bopefully raise funds.

both nights, getting a good view of Scorpio rising. The AGM in June will

photographs etc can be displayed and

Dorset. Members stayed in hotel

on solar eclipse photography. At the

astronomical photographs; a party

the solar outburst of February 1986. Members looked round the Coares

Observatory in Paisley. A weekend in

Edinburgh for Scottish Astronomers is planned for September 1-3.

new nermanent aerial with square

the Condor Brow Observatory, Lancaster.

Finland for the color calings

telescope. It is planned to visit the Durberford & Appleton Laboratory and

SAGAS: The AGM was hosted by the

for skittles and supper.

ATTENTION SEKAS AND WOLAS AND OTHERS:

Please send Newsletters to our new address: 2 Magnolia Way, Chandlers Reach,

PAM AND MARTIN CHICK