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China into Space - and History

The present few years are proving very exciting for China, both in technical advancement and in historical perspective.

Earlier last year, in March 2002, a retired British submariner and navigator presented a remarkable thesis to a group of international scholars at the National Geographical Society. He proposed that Christopher Columbus was preceded in his discovery of America by 72 years, in the famous Voyages of the Ming Dynasty Admiral Zheng-He (or Cheng-po) originally named Sin Bao - which name is believed to have been corrupted by the Arabs into "Sinbad". He, Sinbad, found his way into literature, music, and film in the guise of "The Tales the 1001 Arabian Nights", "Scheherezade", "The Thief of Baghdad", and the "Seven Voyages of Sinbad the Sailor".

The story of the Voyages of Zheng-He are of course a classic of Chinese history and well known there. Briefly, in 1419-22 he was commissioned to lead seven voyages around the Southern Seas and beyond in search of new sources of wealth for his Ming master. He put together a fleet of vast ocean going ships with total crews of up to 19,000 people, and sailed most of the Southern Seas reaching the East Coast of Africa 70 years before the Portuguese, Vasco da Gama. This much is universally recognised world wide by Sinologists and historians in the West.

It is not however well known among the general public in the West, so that the new thesis has caused considerable excitement.

It is well acknowledged that Columbus and other European navigators of the time used secret maps, or Portolani, which were kept hidden on pain of death. These, it is proposed, actually tipped Columbus off about the New World, so that his epic journey was not such a leap in the dark as we in the West have traditionally thought.

Our retired navigator asked himself what might be the original source of such hidden knowledge. Various writers in the West have proposed that the ancient Phoenicians or even inhabitants of the fabled Lost Continent, Atlantis, might be the originators. Some even suggested that ancient satellite maps from alien "Gods" might be the origin!

Our navigator, however, proposed that we consider the obvious possibility that Zheng-He was the source of these portolani. He had after all a huge and well acknowledged fleet, the compass, and a commission to explore widely. He is known to have reached Africa, and evidence emerged that he had reached all the South Sea isles and even Australia, where Chinese artifacts have turned up. He was well equipped to have rounded the Cape of Good Hope and gone on to America. His charting skills were well in advance of the West, and quite likely to have found their way to the West over 70 years - even if their origin was obscure. Much more credible than 3,000 or more years old Phoenician/Atlantean papyri! Why was this origin lost??

Firstly, in those days China was to the West a very distant and mysterious land - almost like the Moon before the 1960's and secondly, Zheng-He after his Seventh Voyage returned to find a new Ming Emperor, who closed down the

(Continued on page 2)

exploration programme as being an irrelevant waste of resources; the Ming Empire - Zhong-guo, the Middle Kingdom - had everything it needed, and required nothing from foreigners. All large ship building was suppressed and the very discussion of foreign exploration was prohibited.

And so it was that the Great Age of Discovery was attributed universally to the sailors of Portugal and Spain, and then England, France, and Holland, while the truth of the Chinese pioneering efforts was lost to the West for nearly 600 years. In time, China retreated into grand isolation while the West went on to become the premier world power. For China, the Middle Kingdom, this was to lead to humiliation and exploitation which has left a sense of grievance to this day, and has done much to fuel the determination of present day China to go her own way in the world and seek Great Power status.

All of this is natural and should be better understood in the West - the more so, as there are signs that History has a twist in the tale for us, and also a totally peaceful route is emerging for China to restore her status without the usual conflict and militarism.

The West, too, risks following the example of the Ming Empire, as follows. Consider:

In 1968-72 America undertook seven successful voyages to the Moon - Apollo 8, then 11, 12, 14-17; these like Zheng-He's were eminently successful, but were terminated by a new Administration - again because of expense and apparent irrelevance. Far sighted counsel has pointed out that in this new century the Moon will be vital for new energy sources (Solar Power satellites), science, and, eventually building habitats to ensure our survival from several natural disasters - but to no avail. America, the world's Great Power, sees no need of such things.

Now we have a far sighted Chinese Space programme, Shen Zhou, leading to the first astronauts, within 18 months, with the apparently full support of a Government

bent on advancing the country's technical social and economic status in the world.

I have attended and contributed to several International Astronautical Federation Congresses - my first being in Beijing in 1996. In Beijing alone the Congress was officially opened by the Head of State Mr. Jiang Zemin, and this despite an important Party Congress at the same time. I take this as a sign of the true importance attached to Space by the Chinese Government.

Space stations are envisaged within 15-25 years (depending on the source!), while the Director of China's Space Agency, Mr. Luan Enjie, predicts a lunar base and expeditions to Mars - in due time. Meanwhile space technologist Mr. Wang Xiji, of the Chinese Academy of Sciences, calls Space the fourth territory after Land, Sea, and Air in which Man will have to learn to comport himself and develop.

It is clear from the remarks of President Jiang Zemin that he is fully mindful of the story of Zheng-He and the Ming Dynasty and does not intend to repeat it. America on the other hand appears to have forgotten the lessons of history. Jiang has declared that China's destiny is to advance into Space, both for reasons of national prestige and all round development of society

I myself would not be surprised to see a return to the Moon in or near the year 2019 - being the 50th anniversary of the Apollo missions and the 600th of the Voyages of Zheng-He. This return, to the growing enthusiasm of many young Chinese, could be a Chinese one. What better way could there be to mark China's growing position in the world than a bloodless non aggressive development of the New Frontier for the betterment and long term evolution of the Human race? In going into Space, China could once again be the most advanced and pioneering civilization on Earth.

Wan sui, Zhongguo!

Dr Michael Martin-Smith, author of "Man Medicine and Space".

On track for NAW 2003

Mars is slowly travelling nearer to Earth, preparing itself for its closest approach to our home planet since the dawn of history (as least for 60,000 years). If there are any Martians, they will be girding their loins ready for the invasion. I hope all societies are girding *their* loins ready for National Astronomy Week 2003 (August 23rd to 30th), ready to take advantage of the free publicity surrounding the event.

Send any planned events to the NAW co-ordinator (john.becklake@virgin.net) and visit the NAW website for details (www.astronomyweek.org.uk).

The NAW committee have managed to get funding for the co-ordinator who will be answering phone calls, developing the website and dealing with any queries. PPARC have awarded us a grant of £5000 to do this. In addition, we have now gained sponsorship from the Faulkes Telescope Project for printing a poster designed by the SPA, which will be available to all societies from mid-January onwards. Keep visiting the website to learn about when and how it will be available.

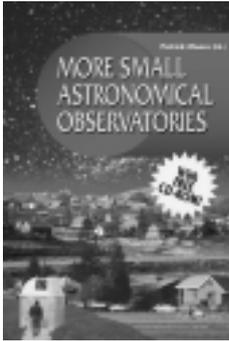
The Faulkes Telescopes Project will be supplying two 2-metre fully robotic telescopes in late 2003 to UK schools and amateurs. Funded by Dr. Martin "Dill" Faulkes, the project seeks to inspire young people to study science, maths and technology subjects, using the excitement of participation in real astronomy research projects as an incentive. Due to the location of the telescopes at professional observatory sites in Hawaii (Haleakala Observatory, Maui) and Australia (Siding Spring, New South Wales), UK users can access them live during the daytime hours via the Internet. Details of how users will register and book time etc. are still being finalised, but more information can be found at www.faulkes-telescope.com With NAW and the Faulkes Telescopes, late 2003 promises to be an exciting time for the UK astronomy community!

So even if we are not invaded by Martians, start preparing now!

Pam Spence, Chairman, NAW 2003

More Small Astronomical Observatories, edited by Patrick Moore.

A review by Callum Potter



Another book in the Springer, Practical Astronomy series, this book is a follow-up volume to “Small Astronomical Observatories” which has now gone out of print. In fact if you missed out on the first volume you will find a CD in the back of this book with the entire contents in Adobe Acrobat PDF format.

More Small Astronomical Observatories is another of the ‘compendium’ style of Springer astronomy books where various authors present short articles with a common theme. This format works well with this subject, which cannot be said of all in this style.

Most observational astronomers desire an observatory at the bottom of the garden, and with few commercial products available (at reasonable cost), the ‘self-build’ approach is often all that is practicable, and may put you off for years. A dedicated observatory, ready to go at a moments notice when there is break in the clouds, is not a luxury but a necessity for the keen observer. There are a few books around which describe building techniques, but this book is devoted to this topic, and provides practical, real-life, insight into aspects of design and construction that you would need to know. This book does not contain, though, detailed plans for you to copy. But most observatories are unique constructions, dependent upon the local circumstances, and you should take ideas from here or there and your own, to achieve a design that works for you. Although most of the contributors are UK based, there are a few from Europe and the USA. Their observatories range from simple covers and roll-off sheds, to roll-off and flip-roof observatories, to self built domes, and commercial domes incorporated into existing and new buildings. It has to be said that the majority of the designs are utilitarian, and aesthetic aspects do not feature highly. It does not take much more effort to produce a design which is visually attractive as well as practical, as the “Ptolemy’s Café” ‘tea-house’ design well demonstrates. Anyone constructing an observatory should take note !

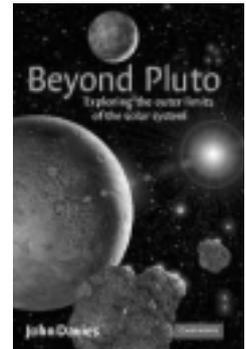
Many of the articles provide information about the telescopes and observing projects undertaken, and some of this text is a little superfluous. To nit-pick further, some of the articles provides little more elaboration than the information that is available about the same observatory on the world-wide-web. However searching observatory information on the internet is frustrating, and consolidation into a book like this valuable in its own right.

If you are contemplating constructing a small, or perhaps not so small, observatory for yourself or society, this book and accompanying CD will be an essential resource. Highly recommended.

More Small Astronomical Observatories, edited by Patrick Moore, published by Springer Verlag, 241 pages, price £24.00, ISBN 1-85233-572-6.

Beyond Pluto: Exploring the Outer Limits of the Solar System, By John Davies

A Review by Jack Climpson



The very recent discovery of Quaoar, half the size of Pluto and 42AU distant, underlines how much is still to be discovered and explained about the structure of the Kuiper Belt and the composition and size distribution of trans Neptunian objects.

Most of our knowledge of this outer fringe of the solar system has emerged in the past 10 years from research carried out by a small, sometimes feuding, family of astrophysicists and astronomers. This small band, of which Davies is a member, has worked painstakingly on computer modelling, developed testable hypotheses and then fought uphill battles for telescope time to run their predictions against the acid test of observation. In their quest for understanding, they have pushed to the limit each advance in CCD technology and computational power, and developed their own image analysis techniques. As a result of their obsession (for such it is) we have been obliged to double our estimate of the size of the solar system.

The book gives an accessible account of the historical context of research into objects beyond Pluto. Davies starts with the work of Edgeworth and Kuiper in the 40s and 50s; outlines the compelling reasoning, developed during the 60s and 70s, that there must be a mass of small material on the outskirts of the solar system; lays out the gathering pace of theoretical and observational developments during the nineties; and ends with an up to date overview of the current state of play, the key players, the questions still awaiting answers and the direction of future research.

However, what brings the book to life even more than the technical details, is the fascinating insight Davies gives into the nomadic existence of young professional astronomers, the excitement of observations which confirm orbital predictions, the frustration of having not quite enough clout to get crucial telescope time, and the ingenious ways of making the most of what resources they do get. (Most discoveries, including that of Quaoar, are still made on telescopes that are small by the standards of professional observatories.)

In the space of ten years this small band of astronomers has turned what was an arcane byway of astronomy into a dynamic field of research which promises to yield the final clues to understanding the dynamics of solar system evolution.

Anyone wanting an insider’s account of this continuing voyage of discovery should read Davies’ book. Thoroughly recommended.

Published by Cambridge University Press in hardback
£12.95 (\$25.00)
ISBN 0-521-80019-6 (hardback)

It'll Be All Right On The Night



Your society is celebrating its Diamond Jubilee. Started by a handful of ARP personnel and fire-watchers during the Second World War, it is now going strong with over a hundred members. Worthy of a celebration? Yes! And that's when the trouble starts.

It is decided that you'll have an American Supper on the club night nearest the anniversary. As Secretary, you volunteer to organise it, a woman's job this. The Vice-chairman is running the club night. Things are going well.

The first hint of trouble comes when the Vice-chairman announces that he has to be away on business on that day. So you hand over the running of the meeting to the Chairman.

A Birthday cake would be nice. And you just happen to have a chef in the society. But no, he's off to Australia to view the eclipse. Within 24 hours however, a committee member has emailed you asking to be allowed to make a cake. Things are now going very well.

To help out you agree to run a quiz and arrange a couple of other items from members. You could also prepare a presentation on the history of the society to run during the party. The society's new data projector can be used for this. The evening is taking shape.

Friday night is club night. On Thursday you arrive home laden with food and drink. On checking your email you discover that the chairman is unwell and unlikely to be able to make it on Friday.

While baking the sausage rolls you practice your deep breathing exercises. A panic attack at this juncture would be unhelpful. Multitasking the baking, the breathing, composing an agenda and a few apposite words for the auspicious occasion occupies the evening. And the laptop you've borrowed for the history presentation has no disk space . . .

Friday morning, the laptop has been sorted and the presentation is rolling. The food is ready. You have an agenda and a speech, of sorts. You check your email. The chairman's absence will be regrettable, but you'll cope. But when you read that the person who's made the cake has been laid low by influenza, now that's a crisis!

Of course the story has a happy ending. The cake, splendidly decorated, was delivered. The chairman recovered

sufficiently to run the show. The historical presentation eventually worked; only half a dozen people were needed to coax the laptop and data projector to talk to one another. The Secretary got her revenge with a fiendish quiz.

Yes, the Bristol Astronomical Society celebrated its Diamond Jubilee in style. The photograph shows Clifford Martin, the society's treasurer and one of its honorary Vice-presidents, cutting the cake. Here's to the next sixty years!

Tricia Brown
Secretary, Bristol Astronomical Society

NEWTON AS



Newton's Astronomical Society opened its doors in June 2002 to an enthusiastic core of astronomers based in the Grantham area of Lincolnshire. Since its conception membership has grown considerably from the forming committee and plans are underway for a new membership drive in the forthcoming year.

Despite the bad weather and a terrible accident on the A1 trunk road, the NAS Christmas party at Woolsthorpe Manor was well attended on Friday 13 December 2002. The function was completely informal and included the usual a spread of seasonal fare including turkey sandwiches, mince pies & nibbles. Special thanks goes to our Programme Secretary, David Harley, who provided entertainment by playing a selection of medieval music to supplement and provide a welcome break from the endless round of taped Christmas tunes.

The year ahead promises to be exciting with a number of interesting talks booked, a group visit to Astrofest 2003, and an exhibition and lecture event for National Astronomy Week to be staged at Woolsthorpe Manor.

Full details of our Society can be found at:
<http://newtonscope.users.btopenworld.com>

IAYC 2003, July 19th - August 8th 2003

The International Astronomical Youth Camp (IAYC) 2003 will take place in the small town of Klingenthal/Germany (12,000 inhabitants). Klingenthal lies in the region called "Vogtland" which forms the geographical border between Bavaria and Saxony (two federal states of Germany). The nearest large towns in the surrounding are Hof in Bavaria (45 km), Plauen in Saxony (30 km) and Karlovy Vary in the Czech Republic (40 km).

The IAYC is an international youth camp with participants from about 20 different countries. As a participant you work for three weeks in one of the 7 working groups - together with other young people - on astronomical projects.

The projects vary from night-time observations to theoretical problems, depending on your own interests. The working groups will be led by young scientists from the IAYC team. In IAYC 2003 we offer working groups which study the following topics: Cosmology, Solar System, Distances in Astronomy, Ancient Astronomy, Robotics in Astronomy, Photography and Astronomy, Practical Astronomy.

Apart from the astronomical program, there are many non-astronomical activities such as group games, sporting events, singing evenings, hiking tours and an excursion. Since it is an international camp, the camp language is English. You should be able and willing to speak English throughout the camp. It is not necessary to speak English fluently.

The accommodation for the IAYC 2003 will be a very pleasant youth hostel called "Jugendherberge Aschberg". The house offers plenty of space for all participants and working groups. There is a soccer field next to the house which can also be used for observations. We will also have our own darkroom.

Anyone between the ages of 16 and 24 and able to communicate in English may participate in the IAYC 2003. The fee for accommodation, full board and the whole program, including the excursion, will be about 425 Euro. For interested persons who are in the situation of not being able to pay the camp fee themselves, it is possible to apply for our grant program.

If you are interested in participating, further information is available at our web site:

www.iayc.org

Or you can order - free of charge - an information booklet including an application form from:

Jörg Dietrich
Steiningerweg 4
85748 Garching b. Muenchen
Germany
tel.: +49 89 32386944
e-mail: info@iayc.org

[If you or one of your society members has attended a camp in the past, or are planning on going to the 2003 camp, why not write a short article about the experience for the FAS Newsletter - get in touch with the Editor. Ed.]

Huddersfield Astronomical and Philosophical Society

Have been achieving great fund raising results with £19,500 and a further £6,000 to come from "The Legaly" which is being used to purchase a Meade 16" LX200. Also £3,912 was received from the Lottery "Awards for All" which was used to purchase a Celestron Nexstar 11 GPS, case, and Induction Loop System for the Observatory. Also £878 was received from Kirklees MC Voluntary Action Community Chest, and £500 from Kirklees MC Cultural Services towards a portable telescope and digital projector.

Also £1,000 from the Cuckoo's Nest Charity Shop again towards portable telescopes. This is in addition to in the past four years £400 from a local engineering company, £800 from Huddersfield Common Good Trust, £1,000 worth of computers from a local newspaper and PC World, and £1,000 from local chemical company Zeneca. There are, in fact, thousands or millions of pounds out there going for the asking.

FAS Annual Convention and AGM, 19th October 2002

Leicester University campus was the destination for this years FAS Annual Convention and AGM, and it was a pleasure to see many members from societies near and far attending. Although attendance was lower than previous years, an excellent speaker programme and an interesting range of displays and trade stands were enjoyed. Paul Money delivered the Ken Marcus Memorial Lecture about 2 Mass, and was also the recipient of the Eric Zucker award.

A number of council members stood down at this years AGM, but these shoes have been filled, and were are pleased to welcome Tim Bance (Minutes), Gary Gawthorpe (Webmaster), Shaun O'Dell (Education Secretary), and Bob Dryden (Slide Librarian) to council.

Arrangements for the 2003 Convention are now underway, and if you have any views about the 2002 convention please let council know, by passing these onto council through Stan Waterman (Meetings Organiser) or Clive Down (Secretary).

FAS Newsletter

At a recent Council Meeting it was agreed to change the publication schedule for the FAS Newsletter. As few societies are 'open' during the summer months, it has been decided to produce three editions each year, in Spring, Autumn, and Winter, at approximately four monthly intervals. The next edition of the FAS Newsletter will be the Spring 2003 edition, final copy date will be 30th April 2003 and will be circulated to member societies in early May 2003.

FAS Egroup

There is an FAS Egroup available, with about 60 members presently. Officers of societies are encouraged to subscribe. Volume of emails from the Egroup are low, and can be read on the web without receiving email at all. To subscribe join at:

<http://www.yahogroups.com/fedastro>

FAS New Member Societies

We are pleased to welcome to the FAS:

West Didsbury AS
Observatory for Cornwall
Roseland Observatory

www.alienpsychology.com

Society For The History Of Astronomy



Dr. Allan Chapman and Mr. Andy Lound, speakers at the SHA Autumn Meeting. Photo Stuart Williams

At the end of the year, the SHA achieved its 100th member, within six months of formation of the society. The society was founded in the summer at Wadham College, Oxford, and held their first

meeting in November at Soho House, Birmingham, with talks by Andy Lound and Allan Chapman. In addition an exhibit stand has 'done the rounds' at the BAA Exhibition Meeting in Cambridge, the FAS Annual Convention at Leicester and the Leeds Astromet. The SHA AGM and Conference will be held on the 22nd February 2003 at the Royal Observatory Greenwich, and will include short papers by members. Dr. John Birks will deliver the main lecture entitled 'John Flamsteed, Astronomical Observer'. Later in 2003 are planned a summer 'picnic' and autumn meeting. The SHA now has its own website domain at <http://www.shastro.org.uk> where more information about the society can be found, or contact the Secretary, Stuart Williams, 26 Matlock Road, Bloxwich, Walsall, WS3 3QD, email secretary@shastro.org.uk.

Liverpool AS



Liverpool Astronomical Society President, David Galvin, presenting Gerard with his award

At the December 2002 Meeting of Liverpool Astronomical Society, University technician Gerard Gilligan of the Department of Veterinary Preclinical Sciences, was presented with the Society's Martin Suggett Award for the Advancement of Astronomy.

This award, presented every year in honour of the late Martin Suggett, Head Curator of the Physical Sciences at Liverpool Museum, is for Gerard's work in the national campaign to control light pollution and work on the Society's web site which was established in 1995 with the help of the University's Computer Services Department.

The Web site, which during 7 years has had almost 900,000 visits by professional and amateur astronomers world wide, was one of the first in the UK set up by an amateur based astronomical society. The Liverpool society has just reach 120 years of activity and meetings, and is regarded as the oldest in the world.

The web site is currently undergoing a complete redesign by it's new web manager but can be accessed at:

www.liverpoolas.org.

SOCIETY ROUND UP

ABINGDON AS

Meetings at 8.00 pm in the Methodist Church Hall, Dorchester Crescent, Abingdon. Further details from Bob Dryden, 01491 201620, or Sebastian Linfoot, 01865 725094. Website www.abingdonastro.org.uk

Feb 10 Our Galaxy, Prof. James Binney

Mar 10 Restoration of the Birr Telescope, Mick Pavey

Apr 14 Mars Odyssey, A History of Mars Observation. Andy Lound

BIRMINGHAM AS

See website www.birmingham-astronomy.co.uk for full details. Wednesday Evenings at Aston Uni. Club Night; Library, telescope construction, & if it is clear observing at the Priory Observatory. Lecture news:

Jan.28th. Dr David Whitehouse The Moon

Feb 25th. Mike Frost on Atmospheric Phenomena

Mar 25th. Ian Birrell Constellations

Apr 29th. Nigel Bannister Rocket Science - X-ray Astronomy

BRISTOL AS

Meetings held on Friday evenings at 7.15pm at Bristol Grammar School, University Road, Bristol. Contact John Pickard (Vice Chairman), tel. 01454 632692 or Tricia Brown (Secretary), tel. 0117 968 5023

Website: www.bristolastrosoc.freereserve.co.uk

Feb 14 AGM

Feb 28 Active Galaxies, Prof Mark Birkinshaw

Mar 14 Light Pollution, Chris Baddiley

Mar 28 Supernovae, Rodney Hillier

Apr 11 Meteorology of Earth and The Other Planets, Dr. Damien Wilson.

May 9 The Rotation of the Earth, Dr. George Wilkins

CARDIFF AS

Meetings alternate Thursdays, September to July, 7.30 pm. at Dept of Physics and Astronomy, Univ. of Wales, 5 The Parade, Newport Road, Cardiff. Contact David Powell (secretary), 029 2055 1704. Email CAS@ilddat.demon.co.uk.

Web site: http://carina.astro.cf.ac.uk/cas/cas_home.html

Feb 6 Black Hole Jets. Dr Diana Worrall

Feb 20 Meteorites Dr Helen Walker

Mar 6 Deep sky observing projects. Dr Nick Hewett

Mar 20 The colours of stars. Mr Peter Grossi

Apr 3 Galaxies and A.G.N.S. Dr Chris Baddiley

Apr 17 Annual General Meeting

May 1 Cosmology for beginners. Dr Rodney Hillier

May 15 Aurora, Neil Bone

COTSWOLD AS

Meetings at Shurdington Church Hall, Shurdington, Cheltenham. Contact Duncan Willoughby 01452 416405. Website www.cotswoldas.org.uk.

Feb 8 "Studying planets, from far and near", Dr. Helen Walker

Mar 8 "Astronomy and Science Fiction", Duncan Willoughby

Apr 12 AGM & Exhibition Meeting

May 10 "Twinkle, twinkle little neutron star", Dr. Paul Roche

EASTBOURNE AS

Meet on the first Saturday of the month from October to July, in the Willingdon Memorial Hall, Church Street, Willingdon. Meetings start at 7.30pm. Contact Peter Gill, tel. 01323 646853

Feb 1 The Dark Side of the Universe, Iain Nicolson

Mar 1 Charting the Stars, Will Tirion

AS OF HARINGEY

Meetings in 2003 at Ashmole School, Southgate, London N14, at 7.30 pm Website: www.ashastro.org.uk.

Feb 19 The Cassini Mission, Dr. John Zarnecki

Mar 19 Exploration of the Moon, Dr. Mike Leggett

Apr 16 Long Range Weather Forecasting, Piers Corbyn

May 21 Double Stars, Richard Westwood.

HEBDEN BRIDGE AS

Meets at Hope Baptist Church, Hebden Bridge, West Yorkshire, every 4th Wednesday from September to May, at 7-30pm. Contact: John Singleton, 01282 616294, email: j.hbas@argonet.co.uk Web site: www.hbas.org.uk

Feb 5 ' Hitching a ride - Did life arrive on a Comet ?' Rod Hine

Mar 5 'Richard Feynman's Lost Lecture' David Lord

Apr 2 ' Planetary Nebulae - the Prettiest Stars' Professor John Dyson

Apr 30 ' The Messier Marathon' Paul Money

May 8 ' The Annual General Meeting and Members Evening'

HUDDERSFIELD ASTRO. & PHIL. SOCIETY

Meetings at Observatory and Town Hall. More info www.huddersfieldastronomy.co.uk. Town Hall meetings:

Feb 7 The Galactic Centre, Dr. Susan Cartwright

Mar 14 Isaac Newton, Prof. Geoffrey Cantor,

Apr 18 TBA, Dr. Richard James.

ILKESTON & DISTRICT AS

Meetings take place after 7:30pm on the 2nd Tuesday of every month, in the function room, Erewash Museum, Anchor Row, Ilkeston, Derbyshire. Further details from Mary McNulty, 01298 78234

Website: <http://members.aol.com/idasastro/index.htm>

Feb 11 Equinox Star Camp video, Mark Thomas

Mar 11 Observatory Construction, Bill Henshaw

Apr 8 2MASS, Paul Money

May 13 Pre-telescopic Astronomers, Martin Lunn

LETCWORTH & DISTRICT AS

Public Star Party event will take place at Standalone Farm, in Wilbury Rd, Letchworth, (which is well sign-posted), and starts at 8.00pm to finish at approximately 10.30 p.m Refreshments, inc. hot tea/coffee will be available, entrance £1.00, children free. Contact Kevan Pye, 01462-625800, kevan.pye@ntlworld.com. Lecture programme:

Jan 29 Bob Forrest - Uni of Herts

Feb 26 Guy Hurst- President of the BAA, Astrosocs & Snova

Mar 26 LDAS Members Talks

Apr 30 Dr. Mike Dworetzky Director, Uni. of London Obsy

LIVERPOOL AS

Venue for monthly meetings is the Roman Catholic Cathedral's Crypt Concert Room, Mount Pleasant, Liverpool. Meetings commence at 7pm until 9pm. Please contact Secretary: Tel 0151-638 3270 or email: clarklunar@aol.com Weekly Meetings at the Society's Pex Hill Observatory every Weds 7-9pm (later if weather allows use of telescopes). Details from the Director of Obs 0151-292 7165

Next Public Star party will be held at Croxeth Park & Hall on Saturday/Sunday March 8th-9th. The Moon, Jupiter and Saturn should be still on view. But as well as telescopes outside there will be many events going in doors - lectures, sales desk, members observations reports & display, workshops, and hot drinks etc.

LOUGHTON AS

Meeting every Thursday at 8.00 pm. in the Scout Hall, Loughton Lane, Theydon Bois, Essex. evenings. Web site las-astro.org.uk

20th Feb Stardust from Meteorites, Dr. Maria Lugaro

10th Apr Meteors, Neil Bone

1st May Astronomical Image Processing Techniques, Nik Szymanek.

NEWBURY AS

Meets at United Reformed Church Hall, Cromwell Place, Newbury, starting at 7.30pm. Contact: Ann Davies, tel. 01635 30598 or David Boyd, tel. 012357 65985

Email: naas@btinternet.com. Website: www.naas.btinternet.co.uk

Feb 14 Variable Stars, Roger Pickard

Mar 14 Making Stars and Making Planets, Dr. Helen Walker

Apr 11 Cosmic Recycling: An Amateur Perspective, Dr. Nick Hewitt

May 9 Observing the Sun, Lee Macdonald.

NORTH EAST LONDON AS

Meets normally on the third Sunday of each month (excluding August) between 3pm and 6pm, in the Park Room, Wanstead House, 21, The Green, Wanstead, London, E11.

Contact Bernard Beeston, tel. 020 8363 5696

PAPWORTH ASTRONOMY CLUB

The Papworth Astronomy Club meets on the first Wednesday of every month from 7:00 to 9:00 p.m. in Papworth Everard, near Huntingdon, either in the Bradbury Progression Centre or in Upper Pendrill Court. Our meetings are open to everyone.

Further details can be obtained from Keith Tritton (tel 01767 677219, email kpt2@tutor.open.ac.uk). The next programme will be distributed in October. If you would like it sent by email please let Keith know your email address.

5 Feb The sky tonight Peter Howell presents the final demonstration in his mini-series. Bring warm clothing and a torch, and if you have them, your own binoculars and telescopes. If cloudy, the meeting will be indoors. Bradbury Progression Centre

SCARBOROUGH & DISTRICT AS

Public observing nights at The Astronomy Centre, Dalby Forest, Thornton Dale, near PICKERING, North Yorkshire, on the first Friday of every month (except June and July). Contact 01723 – 500389, or by visiting the S&DAS web-site:

<http://www.baryte.demon.co.uk/astro>

SOUTHAMPTON AS

Meetings are held in the Seminar Room, Floor 5, Physics and Astronomy Building 46, University of Southampton, at 7-30 pm, on the 2nd Thurs of the month. Contact: John Thompson, 023 8084 2531, e-mail: John.G.Thompson@tesco.net Website:- <http://www.southampton-astronomical-society.org.uk>

Feb 13 "Braneworld - Cosmological Ideas from M/String Theory" by Nick Evans.

March 13 Talk by Dr Julian Hiscox.

April 10 "Weather Satellites helping the Astronomer" by Lawrence Harris.

May 8 "An Astronomer in Antarctica" by Jonathan Shanklin.

STRATFORD UPON AVON AS

Meetings at the Home Guard Club, Tiddington, Nr Stratford upon Avon.

www.astro.org.uk, Mike Whitecross 01789 731784.

28th Jan "Beyond Stonehenge: Ancient Astronomy at Home and Abroad" by Professor C. Ruggles

12th Feb Lunar Crater Workshop

25th Feb "Active Galaxies: Bubbles and X-rays" by Professor Mark Birkinshaw

12th Mar National Science Week Star Party

25th Mar "Human Vision - The Evolution of the Eye" by Professor Jim Bowmaker

9th Apr Double Star Observing Workshop

22nd Apr "Gamma Ray Bursts and the Launch of SWIFT" by Professor K. Pounds

SWANSEA AS

Meetings held at Theatre C Science Tower, Swansea University. Visit our website at

<http://www.swan.ac.uk/astra/astro/starpage.htm>

Further details, Mike Morales (01792-528497)

Feb 13 Not So Parallel Universe - Dr Warren Perkins

Mar 13 Gravitational Waves - Prof. Graham Shore

Apr 10 The Planet Mars - Dr Bob Owen

WEST DIDSBURY AS - NEW SOCIETY

Meets 7.00 - 9.00 pm on 2nd Monday of the month except for July (1st Monday) and August (no meeting), at City College Manchester, Fielden Campus, 141 Barlow Moor Rd, West Didsbury. For further details, contact Kate Graham on 957 1672 or visit <http://groups.msn.com/westdidsburyastronomicalsociety>

WEST YORKSHIRE AS

On Saturday, June the 7th. WYAS is celebrating its 30th anniversary with a convention. The guest speakers are:

Prof. Chandra Wickramasinghe, Steps Towards Discovering Our Cosmic Ancestry.

Prof. Mike Edmunds, Sir Isaac Remembers.

Prof. Mark Bailey. (Director of Armagh Observatory), Earth Relationships: The Science & Risk of Near Earth Objects.

Prof. John Brown. (Astro. Royal for Scotland.), Abra cad Astra.

Starts: 10:30am Finish: approx. 5:00pm. Trade stands. Bar open. Meals on request. Admission £10.

For more info. contact Ken Willoughby on 01977 795535 or E-mail ken.willoughby@btinternet.com

WOLVERHAMPTON AS

Meets alternate Mondays, at 7.30pm, between September and April, with additional meetings in May and June, at Beckminster Methodist Church Hall, Birches Barn Road, Wolverhampton.

Contact Michael Bryce, 01562 742859, email editor@wolvas.org.uk.

Website: www.wolvas.org.uk

Feb 3 Observing the Sun, John Cook

Feb 17 Members session

Mar 3 The Schools Observatory, Dr. Andrew Newsam

Mar 17 The Kuiper Belt, Frank Barretto

Mar 31 Annular Eclipse, Transit of Mercury, Simon Barnett and Mike Bryce

May 12 Imaging the Moon, Alan Wells

WORTHING AS

All Meetings are held on the second Wednesday of every month unless otherwise stated, at Heene Church Rooms, Worthing at 7.30 p.m. Meetings include the latest astronomical work, reports and, photographs by members. For further information please call 01903 521205, on the Internet at www.was.org.uk or Email: worthing_astronomical_society@hotmail.com

Feb 12 Astronomical Imaging from La Palma - Nik Szymanek & Ian King

Mar 12 Indoor Astronomy (remote operating) - Dr. Lilian Hobbs

April 9 TBA

YORK AS

Meetings are held in the Denham Room, The Priory Street Centre, York, Meetings start at 7.30 for 8pm. Members £1.00 Non-members £2. Children under 16 are free. For more information contact Hazel on 07944 751277

7 Feb. Cassini - Huygens - Mission to Mars, Martin Whipp - York AS

21 Feb. The Messier Marathon, Paul Money

7 Mar Starburst Galaxies & Superwinds, Prof John Dyson

21 Mar Report from Gran Canarias, Jim Webster - York AS

4 Apr Discovering Neptune, Tony Skaye

2 May Deep Sky, Dr Nick Hewitt

16 May To see the beginning of Time, Andy Lound

Details should be confirmed before travelling to any meeting mentioned. All programmes may be subject to change with no notice. The FAS can accept no responsibility for any inaccuracies.

LIST OF OFFICERS 2002/2003

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East Anglia Group: **VACANT**
SAGAS Rep: **VACANT**

FAS Publications

The FAS 'Astrocalendar 2002-2003' is now available. The FAS Handbook 2002/3 is currently being printed. One copy of the Handbook is supplied to all societies as part of the membership. Discounts for quantity purchases, pricing details are available at: http://www.fedastro.freemove.co.uk/publications/members_prices.html

Astrocalendar 2002/3	£1.40 + A5 SAE with 33p stamps
Observational Astronomy	£2.00 + A5 SAE with 33p stamps
Using a Telescope	£1.80 + A5 SAE with 33p stamps
Step by Step Astrophotography	£1.30 + A5 SAE with 27p stamps
Choosing a Telescope or Binoculars	£0.60 + A5 SAE with 27p stamps
FAS Handbook 2001 (published 2001)	£1.00 + A5 SAE with 44p stamps
FAS Handbook 2002/3 (published Dec. 2002 - Every paid-up FAS Member Society gets a copy free)	£3.50 + A5 SAE with 44p stamps

Queries are usually easier via e-mail to the Publications Secretary:
publications@fedastro.org.uk

Prices held through 2002

ASTROFEST 2003 February 7/8th

Although the FAS will not be having a stand at this year's Astrofest, any societies wishing to take space in the Societies Room should get in touch with the FAS Secretary, Clive Down, as soon as possible. First come, first served.

Deadline for submission for next newsletter, 30th April 2003

Please remember to send ALL articles to the Editor, Callum Potter. Regrettably material can only be returned if supplied with a SAE.