# International Astronomical Union International Union of the History and Philosophy of Science



# THE ICHA NEWSLETTER NEWSLETTER OF THE INTER-UNION COMMISSION FOR HISTORY OF ASTRONOMY

# No. 5 - June 2003

#### **SUMMARY**

A. AGM Agenda by W. Orchiston	2
B. AGM Minutes 2000 by S. Dick, W. Dick, W. Orchiston	3
C. Organizing Committee 2003-2006 by W. Orchiston	6
D. C41/ICHA Type B resolutions at the Sydney GA by W. Orchiston	12
E. C41/ICHA Type C resolution: Applied Historical Astronomy Database by F.	
R. Stephenson	13
F. Sydney IAU General Assembly: the C41/ICHA History of Astronomy	
Programme by W. Orchiston	14
G. Specialist Research Groups by W. Orchiston	21
H. Changes to the History of Astronomy Working Groups by W. Orchiston	22
I. The C41/ICHA Transit of Venus Working Group. 2: Lord Lindsay's Transit of	f
Venus expedition to Mauritius 1874 by M. T. Brück	24
J. Publication of the 2000-2003 Triennial Report by W. Orchiston	26
K. Time to move on by W. Orchiston	26
L. Journals and Publications:	
- Journal of Astronomical History and Heritage by J. Perdrix, W. Orchiston	27
- Rittenhouse (Astronomical Papers) by R. Brooks	29
- Acta Historica Astronomiae by W. Dick	29
Books 2001/2003	30
Some research papers by C41/ICHA members - 2001/2003	30
M. News:	
- Bicentennial of Bogota Observatory	32
- 2003 Scientific Instrument Symposium by W. M. Bruyns	32
- Société Européenne pour l'Astronomie dans la Culture (SEAC) Meeting	
2003 by S. McCluskey	32
- The History of Science Society's 2003 Annual Meeting, Call for papers	33

	6,7	
	<ul> <li>Titan - From Discovery to Encounter</li> <li>Publications on-line:</li> <li>➤ Cataloghi di strumenti scientifici nella Biblioteca dell'Osservato Astronomico di Palermo by D. Randazzo</li> </ul>	
	Astronomico di Falernio by D. Kanaazzo	
<b>A</b> . <u>A</u>	AGM Agenda	
	The C41/ICHA Annual General Meeting will be held on 2003 July 23 at 9.00 am, in the Merino Meeting Room at the International Convention Centre,  Darling Harbour, Sydney	
	AGENDA	
1. 1. 1.	pen Meeting  1 Welcome  2 Silence in memory of departed members  3 In attendance  4 Apologies	
2. M	linutes of the Previous Meeting	
3. 3.	eports 1 Formation of the ICHA (Gurshtein) 2 Triennial Report (Stephenson) 3 C41/ICHA Working Groups (Orchiston)	
4. 4.	Iembership 1 New C41 Members 2 New C41 Consultants 3 Re-appointment of Existing Consultants	
5. El	lection of C41/ICHA Officers for 2003-2006	
6 6	eneral Business  1 2005 IUHPS/DHS GA, Beijing (Kochhar)  2 2006 IAU GA, Prague (Gurshtein)  3 Other C41/ICHA-sponsored Conferences 6.3.1-2004 "Multi-wavelength Investigations of Solar Activity", Russia (Gurshteir 6.3.2-2004 "Transits of Venus: New Views of the Universe", UK (Orchiston) 6.3.3-2004 "Supernovae Remnants", Greece (David Green)  4 Resolutions 6.4.1-Commemoration of 2009 (Gurshtein) 6.4.2-Historic Radio Astronomy (Orchiston) 6.4.3-Global Catalogue of Pre-telescopic Astronomical Observations (Stephenson)	

#### 6.5 Status of C41 and the ICHA

- 7. ICHA Membership
- 8. Any Other Business

Wayne Orchiston (C41/ICHA Secretary) wo@aaoepp.aao.gov.au

#### B. AGM Minutes 2000

Minutes of the Annual General Meeting of IAU Commission 41 (History of Astronomy) held on Tuesday 15 August 2000 in the Blackett Theatre of Schuster Laboratory at Manchester University

#### 1. Open Meeting

Commission President S. Dick called the meeting to order at 11 am. W. Orchiston and W. Dick were appointed Secretaries for the session, and S. Débarbat balloteer for the elections, with Chris Sterken assisting.

Of the members of the Organizing Committee, W. Dick, A. Gurshtein, I.-S. Nha, W. Orchiston and W. Sullivan were present, as well as Vice President F.R. Stephenson and Immediate Past President S.M.R. Ansari; E. Proverbio and Zezong Xi were unable to attend; 24 others were in attendance, and apologies were received from Professor Warner and Dr Haynes.

A moment of silence was observed for members deceased since the last G.A., including Helen Wright (1997 October 23), Olaf Pedersen (1997 December 3), Heino Eelsalu (1998 July 26), and Derek Howse (1998 July 28).

# 2. Triennial Report

President S. Dick reported on highlights of the last triennium. A Commission web site was set up, thanks largely to the efforts of W. Dick. The President issued six Newsletters to Commission members and others.

Following up on recommendations at the last G.A., the Commission sponsored IAU Colloquium 178 "Polar Motion: Historical and Scientific Problems," held in Cagliari, Sardinia on 1999 September 27-30. At the time of the General Assembly the 641-page Proceedings, edited by S. Dick, D. McCarthy, and B. Luzum, had just appeared as Volume 208 of the Astronomical Society of the Pacific Conference series.

For the current G.A., F.R. Stephenson and S. Dick organized Joint Discussion 6 "Applied Historical Astronomy", held on August 11 with an audience exceeding 100. A Special Session on Astronomical Archives was to be held August 16.

The research of individual Commission members remains strong; highlights are given in the IAU Transactions.

In conjunction with the U.S. Naval Observatory the Commission sponsored an around-the-world time ball drop on New Year's Eve to usher in the year 2000,

involving 20 sites in 8 countries on 6 continents. The event will be repeated for the beginning of the new millennium on 2001 January 1.

President Dick asked W. Orchiston to report on progress of the new *Journal of Astronomical History and Heritage*, which he and J. Perdrix launched following the last G.A. in Kyoto. Five issues had appeared as of 2000 June.

#### 3. Election of Officers, New Members and Consultants

Elections duly held, taking into account absentee ballots, resulted in the following officers for the 2000-2003 triennium:

President: F. Richard Stephenson (UK)
Vice-President: Alex Gurshtein (Russia)
Immediate Past President: Steven Dick (USA)

Organizing Committee: Wolfgang Dick (Germany)

Rajesh Kochhar (India) Tsuko Nakamura (Japan) Il-Seong Nha (Korea)

Wayne Orchiston (Australia) Woodruff T. Sullivan (USA) Brian Warner (S. Africa)

New members of the Commission approved were: Peter Brosche (Germany), Mary Brück (Scotland), Meidong Chen (China PR), Ileana Chinnici (Italy), Brenda Corbin (USA), Teije de Jong (The Netherlands), Hilmar W. Duerbeck (Germany), Daniel Green (USA), Won-Yong Han (Korea), John Hearnshaw (New Zealand), Andre Heck (France), Bambang Hidayat (Indonesia), Masanori Hirai (Japan), Nguyen Dinh Huan (Viet Nam), Siek Hyung (Korea), Bozidan Jovanovic (Yugoslavia), Francoise Launay (France), Eun-Hee Lee (Korea), Kurt Locher (Switzerland), Tsuko Nakamura (Japan), Bjorn Pettersen (Norway), Theodore Rafferty (USA), Clive Ruggles (UK), Lutz Schmadel (Germany), Boonraksar Soonthornthum (Thailand), Helmut Steinle (Germany), Chris Sterken (Belgium), William Tobin (New Zealand), Andreas Verdun (Switzerland), Hitoshi Yamaoka (Japan), George Wilkins (UK), and Endre Zsoldos (Hungary).

New consultants elected were Jean Pierre Cressent (France), Lu Dalong (China), Klaus-Dieter Herbst (Germany), Peter Hingley (UK), Raymond Mercier (UK), M. Nam (Korea), S.R. Sarma (India), Gilbert Satterthwaite (UK), William Sheehan (USA), and John M. Steele (UK).

Consultants re-elected were James A. Bennett (UK), Katherine Bracher (USA), James Evans (USA), Ruth Freitag (USA), Alexander Jones (USA), E.S. Kennedy (USA), David A. King (Germany), Stephen McCluskey (USA), V.N. Sharma (India), B.G. Sidharth (India), Joseph Tenn (USA), Benno van Dalen, Thomas R. Williams (USA), Yaroslaw Wlodarzcyk, and Michio Yano (Japan).

The total membership of the Commission, including new members, stood at 175, plus 25 consultants.

#### 4. Resolutions

On behalf of Alan Batten, the President presented a report relating to the preservation of the sites involved in measuring the Struve arc of the meridian, and their designation as World Heritage Sites, following up a resolution passed at the Hague G.A. in 1994. The meeting asked the President to convey its thanks to Dr Batten for his continuing efforts.

President Dick also reminded members of the long-standing IAU resolution on the preservation and inventory of archives; the special session at this G.A. is meant to regain momentum on this resolution.

The following new Commission resolutions were then unanimously approved:

1) *Recognizing* the historical importance of previous transits of Venus and the numerous transit of Venus expeditions mounted by many countries, and

*Noting* the rarity of the upcoming transits of 2004 and 2012

Commission 41 Recommends that the sites of the previous transit of Venus expeditions be inventoried, marked and preserved, as well as instrumentation and documents associated with these expeditions.

2) From IAU Colloquium 178 "Polar Motion: Historical and Scientific Problems" the following resolution was forwarded and approved regarding the International Latitude Service Buildings and Instruments:

Considering the importance of the contribution of the International Latitude Service to the study of polar motion

Commission 41 Recommends that concerted efforts be made to preserve the buildings and instruments associated with the observatories of the International Latitude Service and predecessor observatories especially the associated geodetic monuments or pillars

# 5. Sydney GA Plans, 2003

There was general agreement that Commission 41 should be try to involve itself in a Symposium in Sydney; that it should be the chief sponsor of a Joint Discussion; and that it should hold the usual business meeting and special meetings of the Commission focusing on specific subjects, perhaps related to its Working Groups. It was noted that the transits of Venus would be a particularly timely subject.

#### 6. Relation of IAU Commission 41 to the IUHPS

For many years Commission 41 has been accepted as a "Joint Commission of the IAU and IUHPS". Professor Ansari provided some clarification of this relationship as an active member of both organizations, and Professor Gurshtein offered some elaboration. It is important that the two organizations co-operate for the benefit of historians (who predominate in the IUHPS sessions) and astronomers (who predominate in IAU Commission 41). After some discussion the matter was referred to the incoming OC for further deliberation as to how communication and co-operation could be maximized.

Professor Ansari noted that the IUHPS will meet in Mexico City on 2001 July 8-14, and of special interest is a session "Astronomical Heritage of non-European Cultural Areas."

#### 7. Other Business

- 7.1.1 Working Groups. The Commission decided to establish the following Working Groups: Archives, Astronomical Chronology, Historical Instruments, and Transits of Venus. Each will have a chairperson and a clearly defined program of work for the next three years.
- 7.1.2 Status of Commission 41. By unanimous vote the Commission reaffirmed the following statement from the Kyoto G.A.: "History of astronomy is a discipline that overarches the entire field of study of the IAU, and therefore should not be confined to one Division. We wish to remain a separate Commission until such time as we can become a separate History of Astronomy Division."
- 7.1.3 *Vote of Thanks*. On behalf of Commission members, Dr Orchiston moved a vote of thanks to Dr Dick for his efforts as C41 President during the past three years.

The meeting was adjourned at 12:45 pm.

S. Dick W. Dick W. Orchiston

# C. C41/ICHA Organizing Committee, 2003-2006

At the July 2003 IAU General Assembly in Sydney we must elect a new Organizing Committee for the forthcoming triennium.

The following nominations (listed in alphabetical order) have been received:

President: Alexander Gurshtein (Russia/USA)

Vice-President: Rajesh Kochhar (India)

Nha Il-Seong (Korea)

Ordinary Members: David DeVorkin (USA)

Wolfgang Dick (Germany)

Liu Ciyuan (China)

Tsuko Nakamura (Japan)

Luisa Pigatto (Italy) Clive Ruggles (UK) Chris Sterken (Belgium) Brian Warner (South Africa)

While Professor Gurshtein will be elected unopposed, we only require one Vice-President and seven Ordinary Members, so there will be a formal election at the

July 23 Annual General Meeting. Meanwhile, who ever is not elected as Vice-President automatically becomes an ordinary Member of the Organizing Committee.

If you cannot attend the Annual General Meeting and would like to cast an absentee vote, please list your preferences for Vice-President and up to six Ordinary Members on a blank sheet of paper, place this in an envelope, sign the back of the envelope, and mail it to:

Dr Wayne Orchiston Secretary C41/ICHA Anglo-Australian Observatory PO Box 296 Epping NSW 2121 Australia.

The deadline for receipt of absentee votes is Wednesday July 16. Note that absentee votes must be sent by mail (not by fax or e-mail).

Only current C41 members are eligible to vote. To help in making your decision, biodata prepared by the different candidates are appended below.

Please direct any queries regarding the election to the undersigned.

Wayne Orchiston wo@aaoepp.aao.gov.au

#### BIODATA FROM MEMBERS STANDING FOR THE 2003-2006 C41/ICHA ORGANIZING COMMITTEE

Born in Moscow, **Alexander A. GURSHTEIN** got a Ph.D. from Moscow University in 1965. For fifteen years, he held various positions on staff in the Institute for Space Research, then the USSR Academy. As an author and a principal investigator, he headed space experiments and was responsible for the scientific aspects of lunar missions during the Space Race. IAU member since 1973.

In 1980, he got a Dr.Sc. (Physics & Math) and began working for the Institute for History of Science & Technology, serving for a time as Vice Director for Research Affairs. He was Editor-in-Chief for the annual on history of astronomy and space, and a Deputy Editor for the Academy magazine, *Nature*. He penned a number of books and numerous scientific and popular publications. While upholding his ties with Russia, since 1995 he has been teaching astronomy and history of science in the US (Mesa State College, Colorado). Main areas of research in astronomical history: instrumentation, planetology, sociocultural problems of astronomy, archaic astronomy.

For decades a member of C41. Repeatedly elected as a member of the OC, and is currently Vice President and head of WG2 (Astronomical Chronology). He was a driving force behind the ICHA. His vision is to expand the role of C41. For the Sydney GA, Gurshtein submitted a proposal for international cooperation to commemorate the 400-year anniversary of telescopic astronomy.

An astrophysicist by training, Prof. **Rajesh KOCHHAR** has a deep additional research interest in history of astronomy. Unlike in astronomy where an observation is assumed to denote a class, it is not possible to say to what extent a historical fact is characteristic or typical. In other words, historical analysis needs to be situated in a framework. It has been Prof. Kochhar's endeavour to develop a cross-cultural civilizational perspective in accordance with the "Principle of cultural Copernicanism" which asserts that no cultural, ethnic or geographical area can be deemed to constitute a benchmark for judging and evaluating others. It thus transcends Eurocentrism as well as anti-Eurocentrism.

More specifically, Prof. Kochhar is interested in the advent (in the colonial context) and growth of modern astronomy in India and elsewhere as also in civilizational history of astronomy through the ages. Prof. Kochhar is a member of the editorial board of the Journal of Astronomical History and Heritage and is also the chairman of the scientific advisory committee to the Government of India's Positional Astronomy Centre, Kolkata.

NHA, II-Seong secured his B.S. and M.S.(Physics) degrees from Yonsei University, Seoul (Korea) and Ph.D. (Astronomy) from the University of Pennsylvania, Philadelphia, USA, where he later worked as a Research Associate. After his return to Korea, he was Professor in the Department of Astronomy, Yonsei University, Seoul. During 1981-1989, he acted as the founder and the Director of Yonsei University Observatory and since 1998 he has been Professor Emeritus at Yonsei University and also George Paik Endowment Professor for 2002-2003. He is ex-President of the Korean Astronomical Society, and presently Chairman of the WG3 on Historical Instruments of C41 and a member of the Editorial Board of the Journal of Astronomical History and Heritage.

Nha's professional interest was originally in the photometric studies of eclipsing binary stars. With two other colleagues he published six volumes of An Atlas of O-C Diagrams of Eclipsing Binary Stars, which was made analysing the collection of over 200,000 times of minimum measurements since the early stage of accurate measurement became possible. He is now working on the restoration of ancient star maps and sundials while writing books on historical astronomy. His other achievement is the establishment of "The Nha Il-Seong Museum of Astronomy" in Yecheon, Korea, in 1999.

**David Hyam DEVORKIN** has been curator, history of astronomy and the space sciences at the National Air and Space Museum, Smithsonian Institution since January 1981. Since 1985 he has held the concurrent position of chairman of the Advisory Committee to the Smithsonian Videohistory Program, and spent the summer and fall of 1991 as a visiting member of the Institute for Advanced Study in Princeton.

DeVorkin's major research interests are in the origins and development of modern astrophysics during the 20th Century; and the origins of the space sciences. He specializes as well in the history of space astronomy and in the government

patronage of science in the post-war era. He has just published a major biography of the Princeton astronomer Henry Norris Russell which has been critically acclaimed and has curated two major exhibitions as well as several smaller ones. He is responsible for collecting astronomical, geophysical and related instrumentation for the Smithsonian, concentrating on the 20<sup>th</sup> Century.

DeVorkin has authored over one hundred scholarly papers and has authored, edited or compiled nine monographs in the history of, and education in, astronomy and the space sciences. His works have appeared in the Journal for the History of Astronomy, Sky & Telescope, Isis, Scientific American, Minerva, Science, Historical Studies in the Physical Sciences, Physics Today, and elsewhere. He has been very active in the American Astronomical Society's Historical Astronomy Division, and is interested in improving world-wide appreciation for the importance of astronomy and its history through the preservation of its heritage, material, social and intellectual.

He holds the PhD in the history of astronomy from the University of Leicester (1978); a Master of Philosophy in Astronomy from Yale (1970); an MS in Astronomy from San Diego State College (1968) and a BS in Astronomy/Physics from UCLA (1966).

Wolfgang R. DICK is an astronomer with the Central Bureau of the International Earth Rotation Service in Frankfurt am Main, Germany. He lives in Potsdam where he formerly worked at the Astrophysical Institute. Since 1992 he has been the Secretary of the Working Group for the History of Astronomy in the Astronomische Gesellschaft. He edits newsletters for the history of astronomy and is co-editor of Acta Historica Astronomiae, a series of books with 17 volumes so far. In IAU Comm. 41/ICHA he concentrates on maintaining its web site (www.astrohist.org).

LIU Ciyuan, PhD, born in 1948, works at Shaanxi Observatory, Chinese Academy of Sciences (National Time Service Center) since 1973. IAU and a Commission 41 member since 1991. Research Professor since 1993. Chairman of the History of Astronomy Committee of the Chinese Astronomical Society, 1998-2002. In the first 10 years of his professional career, he worked with a transit instrument and investigated astrometry. Then his interest turned to historical astronomical records in China. His main work deals with Earth's rotation, astronomical chronology, local relics and archives, and the analysis of various ancient astronomical records. Because of language and other obstacles, Chinese historians of astronomy have little exchange with the international community. Dr. Liu would like to do his best to tone up this exchange, which will apparently benefit both sides.

Dr. **Tsuko NAKAMURA**, Affiliation: National Astronomical Observatory of Japan, Address: Osawa, Mitaka, Tokyo 181-8588 Japan Work field: (1) Observational study of faint main-belt asteroids, and (2) History of Japanese astronomy during 17th-19th centuries.

Since I wrote my first research paper on history of astronomy 15 years ago, I have written a little more than ten papers in this field, mainly in Japanese, and some in English. My primary interest is in astronomical instruments produced in Japan, and the influence on them from the European world. If I am elected as an OC member of C41/ICHA, I think I can contribute to collaborative research on East-West cultural exchange and transfer in terms of astronomy.

Luisa PIGATTO is a Research Astronomer at the Astronomical Observatory of Padova-Italy. She began her research career at the Asiago telescopes-station in 1969, taking part in the international campaign for detecting flare stars in young aggregates, like Orion and Pleiades, with Leonida Rosino, her teacher and director of the Observatory. This program was aimed to give evidence of the existence of this short evolutionary phase of low-mass stars in their path from the pre- to the main-sequence phase. Many flare stars in the Pleiades region were found on the 90/65 Schmidt telescope plates. She continued her research at the Padova Observatory, studying the HR diagrams of young and intermediate age open clusters, comparing the experimental HR diagrams with the theoretical ones; the synthetic clusters method based on evolutionary models with overshooting, using different percentage of binary components, was applied. This method gave new results in age determination of the examined clusters.

From 1992, she started gradually to renovate the old 18th century Observatory of Padova, placed in the medieval tower, which was transformed into an observatory in 1767. Rooms where astronomical observations were made in the past, and related instruments, were restored. So from 1994 the old observatory became an open museum, of which Luisa Pigatto serves as its scientific head (see: http://www.pd.astro.it/museo-laspecola).

From 1993, she has taken part in a project, promoted by the Faculty of Science and the Centre for the history of the Padova University, publishing the scientific biographies of teachers of this University from the foundation of the Artist Faculty at the end of 13th century to 20th century.

From 1995, she began to teach history of astronomy at the University of Padova. Now her main research interests are in history of astronomy, especially with respect to astronomy in Padova, both for the period concerning the Astronomical Observatory from its foundation to the first 50 years of 20th century, and teachers of astronomy at the Padova University before and after Galileo's teaching in Padova.

Luisa Pigatto feels that an effective collaboration among astronomers interested in history of astronomy before 19th century and scholars of history of science of humanistic formation and historians in general, should be strongly recommended and promoted by Commission 41, in order to improve the quality of this discipline, which in the astronomical scientific community suffers poor consideration.

Clive RUGGLES: I am Professor of Archaeoastronomy at the University of Leicester, UK, based in the School of Archaeology and Ancient History. Like many

others working in this field I have followed an unusual career path, in my case starting as an astrophysicist and arriving at my present appointment only over many years and via several other disciplines.

My research interests in archaeoastronomy and ethnoastronomy stretch back over 25 years, focused mainly on the astronomical significance of later prehistoric monuments of north-western Europe, straying occasionally into historical Mesoamerica and South America and modern sub-Saharan Africa, and during the last five years concentrated in ancient Polynesia. During all this time I have been attempting to reconcile the very different, but all undoubtedly relevant, disciplinary perspectives of astronomers, archaeologists and historians. I have published 8 books (with 3 more in press) and over 100 research papers in a wide variety of journals, and have organised a number of international conferences. For several years I was editor of the Archaeoastronomy supplement to Journal for the History of Astronomy (continuing now as Advisory Editor), and am now co-editor of Archaeoastronomy: The Journal of Astronomy in Culture published by the University of Texas Press. For six years I served as President of the Societé Européenne pour l'Astronomie dans la Culture (SEAC) and I am currently President of the International Society for Astronomy and Astronomy in Culture (ISAAC) which was formed in 1993 to strength links between archaeoastronomers, astronomers, archaeologists, and historians of astronomy.

I am standing for election to the C41/ICHA OC for 2003-2006, because I believe that the profile of the history of astronomy amongst mainstream astronomers will be considerably strengthened by including archaeoastronomy explicitly and prominently in the C41/ICHA remit. There is a strong intrinsic interest in archaeoastronomy amongst astronomers at large, and the field occasionally has a vital part to play, for example in Hawaii, where it is currently developing a key role in helping to resolve cultural concerns surrounding the continued siting of the observatory on Mauna Kea.

If elected, I shall work to promote archaeoastronomy as part of the history of astronomy programme within the IAU, and attempt to build links between C41/ICHA and ISAAC, as the major academic body representing archaeoastronomy. This is something I consider vital in helping to build viable career paths for people interested in pursuing a research career in this field. Also, given the lack of success in securing a historically-based JD at the 2003 GA, I am keen to work towards a strong bid for a JD in Prague. I am quite sure that archaeoastronomy could play a vital role in this.

Chris STERKEN, Research Director at the University of Brussels, Guest Professor (History of Physics course, Observational Astronomy course), President IAU Comm. 25 (Photometry and Polarimetry 1997-2003), Incoming President IAU Division IX, Editor of 'The Journal of Astronomical Data'

History of Astronomy: Editor of "100 years of observational astronomy and astrophysics: homage to Miklos Konkoly Thege" (Sterken, C.; Hearnshaw, J., 2002); Editor of "KARL FRIEDRICH ZOELLNER and the historical dimension of astronomical photometry" (Sterken, C.; Staubermann, K. B. 2000). Miscellaneous

papers on the history of photometry and related topics in Vistas in Astronomy and Conference proceedings.

**Brian WARNER**, Distinguished Professor of Natural Philosophy at the University of Cape Town, South Africa. Head of Department of Astronomy at the University of Cape Town, (1972 - present).

Member of Organising Committee of Commission 41 of the IAU. Past Chairman of Commission 42 (Interacting Binary Stars). Gave Invited Discourse at the IAU General Assembly in Kyoto.

Astrophysics interests: Cataclysmic Variable Stars, pulsating degenerate stars, high speed astronomical photometry.

History of Astronomy research interests: nineteenth century British and South African astronomy. Much wider general interests. Has published 8 books in the area of history of astronomy (see Web page: mensa.ast.uct.ac.za).

Service to Commission 41: probably the most valuable will be through support on the IAU Executive - as a Vice President of the IAU (to be appointed for 6 year term at the General Assembly in Sydney). Otherwise will help as time is available (not a lot currently, as have a lot of observing and astrophysical commitments).

# D. C41/ICHA Type B resolutions at the Sydney GA

As mentioned in the 2002 December *Newsletter*, C41/ICHA was preparing two B-type resolutions for consideration by the IAU at the Sydney General Assembly. One of these related to the early development of the telescope and commemoration of the year 2009, and the full wording of this motion was reproduced in that *Newsletter*.

The other resolution—simply mentioned there in passing—was about surviving historically-significant radio telescopes, and the full wording of the English version of it follows below (it was submitted in English *and* French).

I am happy to say that this resolution was also adopted by Commission 40 (Radio Astronomy), so it was submitted to the IAU Executive Committee on behalf of Commissions 40, 41 and the ICHA. As the wording indicates, adoption of the resolution at the General Assembly will result in the formation of a new C40-C41/ICHA Working Group and we have gathered an excellent pool of specialists from around the world to serve on its Committee.

# "Historic Radio Astronomy"

Recalling

that the birth of radio astronomy brought an exciting new added multiwavelength dimension to astronomical research;

recognizing

that this new investigative technique led to a major change in our perspective of the cosmos; and

noting

that all of the surviving pioneers of radio astronomy from the era 1940-1960 have now reached an advanced age, and much of the instrumentation that was used for radio astronomical investigations during these formative years is now lost to us,

#### recommends

that every effort be made to identify, document and preserve surviving examples of historically-significant radio telescopes and ancillary instrumentation worldwide and to document the research programs carried out with such equipment, and

#### requests

that in order to pursue this important radio astronomical heritage project IAU Commissions 40 and 41 and the Inter-Union Commission for History of Astronomy collectively form an Historic Radio Astronomy Working Group with a Committee comprising R. Davies (UK), J.-F. Denisse (France), K. Kellermann (USA), M. Morimoto (Japan), W. Orchiston (Australia, Chair), S. Slysh (Russia), G. Swarup (India) and H. van Woerden (Netherlands).

#### **Further Information**

For further information about this resolution or the planned new Working Group please contact the undersigned.

Wayne Orchiston, Secretary, C41/ICHA E-mail: wo@aaoepp.aao.gov.au

# E. C41/ICHA Type C resolution: Applied Historical Astronomy Database

C41/ICHA,

recalling

that pre-telescopic astronomical records cover a substantial proportion of human history and originate from many different cultures,

recognizing

that these records are of a wide variety of celestial events, occurring both within the solar system itself and in the wider universe,

and considering

that such early records are of vital importance in identifying both rare events such as novae and supernovae and investigating long-term variations in such diverse phenomena as solar variability and Earth's rotation,

#### recommends

that a comprehensive data base of pre-telescopic records of celestial phenomena, with English translations and appropriate Julian or Gregorian dates, be assembled and made available to the astronomical community worldwide.

F. Richard Stephenson

# F. Sydney IAU General Assembly: the C41/ICHA History of Astronomy Programme

#### 1. OVERVIEW

Table 1: The History of Astronomy program at the Sydney General Assembly

Day	Session	Stream 1 (Venue: Skyline	Stream 2 (Venue: Merino)
		1)	
Monday 21	1	<b>SM1:</b> Applied Historical	<b>SM2:</b> The Early Development of
July		Astronomy	Australian Radio Astronomy
	2	<b>SM1:</b> Applied Historical	<b>SM2:</b> The Early Development of
		Astronomy	Australian Radio Astronomy
	3	WG1: Astronomical	<b>SM2:</b> The Early Development of
		Archives	Australian Radio Astronomy
	4	WG1: Astronomical	<b>SM2:</b> The Early Development of
		Archives	Australian Radio Astronomy
Tuesday 22	1	WG3: Historical	<b>SM5:</b> Pioneering Observations in
July		Instruments	Radio Astronomy
	2	WG3: Historical	<b>SM5:</b> Pioneering Observations in
		Instruments	Radio Astronomy
	3	WG4: Transits of Venus	SM3: Recent Research
	4	WG4: Transits of Venus	SM3: Recent Research
Wednesday	1		BM1: C41/ICHA AGM
23 July	2	WG2: Astronomical	SM4: Ethnoastronomy &
		Chronology	Archaeoastronomy

# 2. DETAILS OF THE VARIOUS SCIENCE (SM) AND WORKING GROUP (WG) MEETINGS

### SM1: Applied Historical Astronomy (July 21, 2003)

Organizing Committee: Liu Ciyuan (China), Nha Il-Seong (Korea), John Steele (Canada), and Richard Stephenson (UK, Chair).

Contact: Professor F. Richard Stephenson, Department of Physics, University of Durham, South Road, Durhan DH1 3LE, UK (f.r.stephenson@durham.ac.uk).

#### **Programme**

Session 1 (Chair: Richard Stephenson)

- 9.00–9.30 Steele, J.M. (Canada) "Applied historical astronomy: an historical perspective." (Keynote Paper)
- 9.30–9.45 Fujiwara, T. (Japan) "Searching for long-term variability of stars among historical records."

- 9.45–10.00 Frew, D., & Orchiston, W. (Australia) "Nineteenth century Australian observations of Eta Carinae: international controversy and astrophysical implications."
- 10.00–10.15 Green, D.A. (UK), & Orchiston, W. (Australia) "In search of *Mahutonga*: a possible supernova recorded in Maori astronomical traditions."
- 10.15–10.30 Allen, C., & Poveda, A. (Mexico) "The importance of old measures for small star cluster kinematics."

#### Session 2 (Chair: David Green)

- 11.00–11.15 Stephenson, F.R. (UK) "Ancient eclipses and Earth's rotation: an update."
- 11.15–11.30 Kawabata, K.-A., Tanikawa, K., & Soma, M. (Japan) "Time variation of the moment of inertia of the Earth derived from Chinese and Japanese records of ancient solar eclipses."
- 11.30–11.45 Soma, M., Tanikawa, K., Kawabata, K.-A. (Japan) "Tidal term of the lunar longitude in the past 2,700 years derived from Chinese and Japanese records of ancient solar eclipses."
- 11.45–12.00 Lee, E.-H. (Korea), Ahn, Y.-S. (Korea), & Chen, K.-Y. (USA) "Solar cycle derived from the historical records of sunspots and aurorae."
- 12.00–12.15 Green, D.W.E. (USA) "Historical astrometric and photometric data on comets and supernovae."
- 12.15–12.30 Xu, Z.-T. (China) "Astronomy on oracle bone inscriptions: recent progress."

\*\*\*

# SM2: The Early Development of Australian Radio Astronomy (July 21, 2003; Commissions 40 & 41 Joint Meeting)

- Organising Committee: Miller Goss (USA), Dave Jauncey (Australia), Ken Kellermann (USA), Wayne Orchiston (Australia, Co-Chair), and Woody Sullivan (USA, Co-Chair).
- Contact: Dr Wayne Orchiston, Australia Telescope National Facility, PO Box 76, Epping, NSW 2121, Australia (Wayne.Orchiston@csiro.au)

#### **Programme**

Session 1 (Chair: Ken Kellermann)

- 9.00–9.30 Sullivan, W.T. (USA) "A half-century of Australian radio astronomy, 1939-1988: From wartime radar to the Australia Telescope." (Keynote Paper)
- 9.30–10.00 Minnett, H. (Australia) "Fifty years in radio science and its applications." (Keynote Paper)
- 10.00–10.20 Murray, J. (Australia) "The Penrith and Dapto solar radio spectrographs."
- 10.20–10.30 Movie presentation: "Hush Hush."

- Session 2 (Chair: Woody Sullivan)
- 11.00–11.30 Bracewell, R. (USA) "Joe Pawsey and his influence on the development of Australian radio astronomy." (Keynote Paper)
- 11.30–11.50 Slee, O.B. (Australia) "Early Australian measurements of radio source structure."
- 11.50–12.10 Robinson, B. (Australia) "Early observations of the H-line in Sydney."
- 12.10–12.30 Murray, J. (Australia) "Development of the Murraybank multi-channel H-line receiver."

#### Session 3 (Chair: Miller Goss)

- 2.00–2.30 McLean, D. (Australia) "The solar radio astronomy program at Culgoora: an historical overview." (Keynote Paper)
- 2.30–2.50 Morimoto, M. (Japan) "The Culgoora Radioheliograph and Radiospectrograph."
- 2.50–3.10 Suzuki, S. (Australia) "The Culgoora Spectro-polarimeter."
- 3.10–3.30 Duncan, R.A. (Australia) "History of the determination of Jupiter's rotation period."

#### Session 4 (Chair: Dave Jauncey)

- 4.00–4.30 McAdam, B. (Australia) "From Molonglo Cross to MOST: a scientific appraisal." (Keynote Paper)
- 4.30–4.50 Batchelor, B., & Sinclair, M. (Australia) "Receiver development for the Parkes Radio Telescope."
- 4.50–5.10 Milne, D., & Whiteoak, J. (Australia) "The impact of Frank Gardner on the first years of research with the Parkes Radio Telescope."
- 5.10–5.30 Finlay, E. (Australia) "The 30 MHz array at Fleurs."

\*\*\*

### SM3: Recent Research (July 22, 2003)

Organising Committee: Wolfgang Dick (Germany), Rajesh Kochhar (India), Tsuko Nakamura (Japan, Chair), and Brian Warner (South Africa).

Contact: Dr Tsuko Nakamura, The National Observatory of Japan, 2-21-1 Osawa, Mitaka, Tokyo 181, Japan (tsuko@cc.nao.ac.jp).

# **Programme**

# Session 3 (Chair: Tsuko Nakamura)

- 2.00–2.30 Chubey, M.S, Abalakin, V.K., Dadaev, A.N., Kopylov, I.M., Lavrinovich, K.K., Moskovchenko, N.Ya., Ikhsanova, V.N., Tolbin, S.V., Kaptsyug, V.B., Nevskaya, N.I., Kuznetsova, A.B. (Russia), and Schmeidler, F., & Lekhtman, A.M. (Germany) "Astronomers of the Struve family: scientific contribution, way and heritage." (Keynote Paper)
- 2.30–2.50 Graham, J.A. (USA) "Before the fire: Mount Stromlo Observatory in the mid-twentieth century."

- 2.50–3.10 Williams, T.R. (USA) "The amateurization of astronomy in Britain and the United States."
- 3.10–3.30 Evans, J. (USA) "The astrologer's apparatus: a picture of an astronomical speciality in Greek Egypt."

#### Session 4 (Chair: Brian Warner)

- 4.00–4.30 Milone, E.F., & Winmill, B.D. (Canada) "On the astronomical implications of the monuments on Nemrud Dagh." (Keynote Paper)
- 4.30–4.50 Hirai, M., & Nishimura, N. (Japan) "Re-analysis of the first Japanese star catalogue appearing in 'Tenmon Keito'."
- 4.50–5.10 Lu, D. (China) "The characters of leap years in the calendars of the Qing Dynasty (A.D. 1644-1911)."
- 5.10–5.30 Jochi, S. (Taiwan) "A brief study of the 'Taiwan Civil Calendar'."

#### Poster Papers:

Orchiston, W. (Australia) "A one-man Greenwich of the south? The remarkable observational record of John Tebbutt."

Souchay, J. (France) "Contribution of D'Alembert's work to the theory of the Earth's rotation."

\*\*\*

#### SM4: Ethnoastronomy & Archaeoastronomy (July 23, 2003)

Organising Committee: Clive Ruggles (U.K., Chair), and Keith Snedegar (USA). Contact: Professor Clive Ruggles, School of Archaeological Studies, University of Leicester, University Road, Leicester LE1 7RH, UK (rug@le.ac.uk).

#### **Programme**

Session 2 (Chair: Keith Snedegar)

- 11.00–11.30 Ruggles, C. (U.K.), & Snedegar, K. (USA) "General introduction and key issues illustrated by an Hawaiian case study." (Keynote Paper)
- 11.30–11.45 Fairall, A.P., & Matomela, T. (South Africa) "Xhosa astronomical knowledge."
- 11.45–12.00 Holbrook, J. (USA) "Introduction to African cultural astronomy."
- 12.00–12.15 Kusumowardani, A. (Indonesia) "A study in ethno-astronomy in Central Java: an application of traditional wisdom for cultivating land."
- 12.15–12.30 Stoev, A., et al. (Bulgaria) "Observational prognostic and cult astronomical practices in the territory of rock-cut monuments."

#### Poster Papers:

Hoskin, M. (U.K.) "The orientation of European prehistoric tombs and temples."

McCluskey, S.C. (UK) "The nature of medieval astronomical concepts and the orientation of churches."

- Muglova, P., et al. (Bulgaria) "Sunrises extreme points used in the sighting equipment of the Harman kaya rock-cut monument near the village of Dolna Chobanka, Bulgaria."
- Nguyen, M.T., & Nguyen, T.V. (Vietnam) "The bamboo stick calendar of the Muong people of Vietnam."

Simonia, I. (Georgia) "Ancient Georgian metallic cosmograms."

\*\*\*

#### SM5: Pioneering Observations in Radio Astronomy (July 22, 2003)

Organising Committee: Wayne Orchiston (Australia, Chair), and Bruce Slee (Australia).

Contact: Dr Wayne Orchiston, Australia Telescope National Facility, PO Box 76, Epping, NSW 2121, Australia (Wayne.Orchiston@csiro.au)

#### **Programme**

Session 1 (Chair: Bruce Slee)

- 9.00–9.30 Kellermann, K. (USA) "Grote Reber: maverick scientist and father of radio astronomy." (Keynote Paper)
- 9.30–9.50 Radhakrishnan, V. (India) "Olof Rydbeck and early radio astronomy in Sweden."
- 9.50–10.10 Sullivan, W. (USA) "Wurzburg dishes: German WWII radar antennas vital to early radio astronomy in every country but Germany (and Australia)."
- 10.10–10.30 Orchiston, W. (Australia) "Dr Elizabeth Alexander: first female radio astronomer?"

Session 2 (Chair: Wayne Orchiston)

- 11.00–11.30 Goss, M. (USA) "Ruby Payne-Scott (1912-1981): Australian pioneer in radiophysics and radio astronomy." (Keynote Paper)
- 11.30–11.50 Kardashev, N.S., & Matveenko, L.I. (Russia) "The early development of USSR radio astronomy."
- 11.50–12.10 Goss, M. (USA), & Slee, B. (Australia) "The discoveries of Sagittarius A in New South Wales in 1951 and Sagittarius A\* in West Virginia in 1974."
- 12.10–12.30 Morimoto, M. (Japan) "Early Japanese mm-wave observations and their impact on international radio astronomy"

#### Poster Papers:

- Jauncey, D.L., Lovell, J.E.J. (Australia), Koyama, Y. (Japan), Fey, A.L. (USA), Edwards, P.G. (Japan), Aller, M.F., Aller, H.D., Klein, M.J. (USA), & the GAVRT Team "Interstellar scintillation observations: back to the future."
- Orchiston, W., Chapman, J., Slee, B., Sharp, P. & Parsons, B. (Australia) "Interpretation of the historic Dover Heights field station: an ATNF heritage project."

\*\*\*

#### WG1: Astronomical Archives (July 21, 2003)

Organising Committee: Suzanne Débarbat (France, Chair), Wolfgang Dick (Germany), and Wayne Orchiston (Australia).

Contact: Dr. Suzanne Débarbat, Observatoire de Paris, 61 av de l'Observatoire, 75014 Paris, France (Suzanne.Debarbat@obspm.fr).

#### **Programme**

Session 3 (Chair: Suzanne Debarbat)

- 2.00–2.30 Chapman, J., Orchiston, W., & Norris, B. (Australia) "The ATNF Historic Photographic Archive: development of the digital image database." (Keynote Paper)
- 2.30–2.50 Corbin, B.G. (USA) "Archives in the U.S. Naval Observatory—recent projects."
- 2.50–3.10 Perkins, A. (UK) "The Royal Greenwich Observatory archives in Cambridge: an overview."
- 3.10–3.30 Orchiston, W. (Australia). "Highlighting the history of nineteenth century Australian astronomy: The Tebbutt Collection in the Mitchell Library, Sydney."

Session 4 (Chair: Richard Stephenson)

- 4.00–4.30 Nakamura, T. (Japan) "The Japanese Astronomical Archives Project: a progress report." (Keynote Paper)
- 4.30–4.50 Débarbat, S., & Bobis, L. (France) "Alidade Project work in progress."
- 4.50–5.10 Pigatto, L., Salmaso, M., & Zanini, V. (Italy) "The Lorenzoni-Tacchini correspondence in the Padova Observatory archives. The "true" history of Italian astronomy in the second half of the nineteenth century."
- 5.10–5.30 Stavinschi, M., & Mioc, V. (Romania) "Storing astronomical information in the Romanian territory."

Poster Papers:

Moran, K., & Brück, M.T. (UK) "The Crawford Collection at the Royal Observatory Edinburgh."

Simonia, I. (Georgia) "Old Georgian astronomical manuscripts."

\*\*\*

# WG2: Astronomical Chronology (July 23, 2003)

Organising Committee: Adriaan Blaauw Netherlands), Alex Gurshtein (USA/Russia, Chair), Teije de Jong (Netherlands), and Brian Warner (South Africa).

Contact: Professor Gurshtein, Mesa State College, PO Box 2647, Grand Junction, CO 81502, USA (agurshtein@hotmail.com).

#### **Programme**

Session 2 (Chair: Alexander Gurshtein)

- 11.00–11.30 Jong, T. de (Netherlands) "Milestones in the early development of Mesopotamian astronomy."
- 11.30–12.00 Perdrix, J.L. (Australia) "Top ten of the second millenium."
- 12.00–12.30 Gurshtein, A.A. (USA/Russia) "Project CHRONICA."

\*\*\*

#### WG3: Historical Instruments (July 22, 2003)

Organising Committee: John Briggs (USA), Nha Il-Seong (Korea, Chair), and Wayne Orchiston (Australia).

Contact: Dr Wayne Orchiston, Anglo-Australian Observatory, PO Box 296, Epping, NSW 2121, Australia (wo@aaoepp.aao.gov.au)

#### **Programme**

Session 1 (Chair: Luisa Pigatto)

- 9.00–9.30 Lomb, N. (Australia) "Historically significant astronomical instruments at Sydney Observatory." (Keynote Paper)
- 9.30–9.50 Orchiston, W. (Australia) "History of the 'Catts Telescope': a nineteenth century 20-inch Grubb reflector."
- 9.50–10.10 Kaptüg, V.B., Chubey, M.S., Vereshchagin, S.A., & Sokolov, Y.A. (Russia) "On recovery and research work at the Russian Struve station in Gogland."
- 10.10–10.30 Smith, J.R. (UK) "Meridian arc measurements over the centuries."

Session 2 (Chair: Fred Watson)

- 11.00–11.30 Johnson, K. (UK) "A glimpse at the astronomy heritage of the Science Museum, London." (Keynote Paper)
- 11.30–11.50 Satterthwaite, G.E. (UK) "Sir George Airy's instruments for positional astronomy."
- 11.50–12.10 Pigatto, L., Tomasella, L., & Zanini, V. (Italy) "Telescopes at the Astronomical Observatory of Padova, Italy. From the last refractor to the first reflector."
- 12.10-12.30 Nakamura, T. (Japan) "Early historic telescopes preserved in Japan."

#### Poster Papers:

- Shankland, P.D. (USA), & Orchiston, W. (Australia) "The historic Clark refractor at the U.S. Naval Academy."
- Watson, F. (Australia) "James Gregory and the invention of the Cassegrain telescope."
- Watson, F., McCowage, C., & Cannon, R. (Australia) "The Anglo-Australian Telescope after three decades: an historical perspective."

#### WG4: Transits of Venus (22 July, 2003)

Organising Committee: Steven Dick (USA), Alex Gurshtein (USA/Russia), Rajesh Kochhar (India), Wayne Orchiston (Australia, Chair), and Luisa Pigatto (Italy).

Contact: Dr Wayne Orchiston, Anglo-Australian Observatory, PO Box 296, Epping, NSW 2121, Australia (wo@aaoepp.aao.gov.au)

#### **Programme**

Session 3 (Chair: Steven Dick)

- 2.00–2.30 Fioravanti, R., Monaco, G., Pigatto, L., & Zanini, V. (Italy) "Transits of Venus observed in Italy in 1761 and 1882." (Keynote Paper)
- 2.30–2.50 Duerbeck, H.W. (Germany) "The German Venus transit expeditions of 1874 and 1882—organisation, stations, methods, results."
- 2.50–3.10 Orchiston, W. (Australia) "The nineteenth century transits of Venus: an Australian and New Zealand overview."
- 3.10–3.30 Edwards, P. (Japan) "Charles Todd's observations of the transits of Venus."

Session 4 (Chair: Wayne Orchiston)

- 4.00–4.30 Dick, S.J. (USA) "The American transit of Venus expeditions of 1874 and 1882." (Keynote Paper)
- 4.30–4.50 Sterken, C., & Duerbeck, H.W. (Belgium) "The Belgian Venus transit expedition of 1882 to Texas and Santiago—a reappraisal."
- 4.50–5.10 Mourao, R.R. de F. (Brazil) "The Brazilian contributions to the transits of Venus."
- 5.10–5.30 Kochhar, R. (India) "The role of transits of Venus in the development of modern astronomy in India."
- 5.30–5.40 Misch, T., & Sheehan, W. (USA) "The 1882 transit of Venus reanimated." (Short movie presentation: world premiere!)

#### Poster Papers:

Botez, E. (Romania) "The northeast expedition for the observation of the transit of Venus on June 3rd 1769, and its leader."

Brück, M. (UK) "Lord Lindsay's transit of Venus expedition to Mauritius in 1874."

Gent, R. van, Zandstra, A., Staubermann, K., & Hooijmaijers, H. (Netherlands) "The Dutch transit of Venus expeditions to Réunion (1874) and Curação (1882)."

Wayne Orchiston (C41/ICHA Sydney Program Co-ordinator)

# G. Specialist Research Groups

Since the initial report appeared in the previous *Newsletter*, there have been changes to the contact persons for two of the groups (Astronomical Archives, and Transits of Venus). Here is an up-dated list:

Research Group	Contact	E-mail
Applied Historical Astronomy	Richard Stephenson (UK)	f.r.stephenson@durham.ac.uk
Astronomical Archives	Brenda Corbin (USA)	brenda.corbin@usno.navy.mil
Astronomical Chronology	Alexander Gurshtein (USA)	agurshtein@hotmail.com
Ethno/Archaeastronomy	Clive Ruggles (UK)	rug@leicester.ac.uk
Historical Instruments	Il-Seong Nha (Korea)	SLISNHA@chollian.net
Radio Astronomy	Wayne Orchiston (Australia)	) wo@aaoepp.aao.gov.au
Transits of Venus	Steve Dick (USA)	dick.steve@usno.navy.mil

If you would like to be involved in any of these groups simply e-mail the appropriate contact person.

Wayne Orchiston E-mail: wo@aaoepp.aao.gov.au

# H. Changes to the History of Astronomy Working Groups

Introduction

There are currently four C41/ICHA Working Groups (WGs) within the IAU, and these relate to astronomical archives, astronomical chronology, historic astronomical instruments, and transit of Venus (and a proposal to form a fifth WG, on historic radio astronomy, will be considered at the July General Assembly in Sydney).

The Archives WG was founded in 1991, primarily to establish a register of extant astronomical archives of historical interest, and to encourage their preservation, conservation, cataloguing and interpretation. The Astronomical Chronology WG was set up in 2000 in order to compile a wide-ranging internationally-approved master list of the major milestones in the history of astronomy that profoundly influenced its development. The Historic Instruments WG was formed in 2000, primarily to establish a register of extant astronomical instruments of historical importance, and to encourage their preservation, conservation, cataloguing and interpretation. The Transits of Venus WG also was founded in 2000 with the up-coming 2004 and 2012 transits in mind, and aims to document the sites, personnel, instruments and publications associated with the observation of previous transits, and to encourage the preservation and interpretation of such sites.

Working Groups report to the profession through the *ICHA Newsletter*, and in the case of some WGs, via *ad hoc* reports published in the *Journal of Astronomical History and Heritage*.

Membership of WGs is open to all interested C41/ICHA members, simply by contacting the chair person of the relevant WG Committee. There are no formal application forms, nor are annual subscriptions payable.

#### Changes to the Working Groups

Every three years, the IAU Executive Committee (EC) decides on the continuation or otherwise of extant WGs, largely on the basis of recommendations submitted by their overseeing commissions. Commission 41/ICHA has requested that the EC approves the continuation of all four history WGs for 2003-2006.

In preparing our submission to the EC, the Organising Committee of C41/ICHA carried out a review of all four WGs, and ended up making substantial revisions to the composition of each WG Committee. In addition, the chair persons of the Archives and Transits of Venus WGs asked to stand down (but to remain on their respective Committees), and were replaced by excellent substitutes.

Listed below are the Committee Members of each of WG, subject to their imminent approval by the IAU EC.

**Archives:** Ms Brenda Corbin (USA, Chair), Dr Ileana Chinnici (Italy), Dr Suzanne Débarbat (France), Dr Wolfgang Dick (Germany), Mr Daniel Green (USA), Dr Wayne Orchiston (Australia), Mr Adam Perkins (UK). *Contact person*: Ms Brenda Corbin, U.S. Naval Observatory, 3450 Massachusetts Ave NW, Washington DC 20392-5420, USA (e-mail: brenda.corbin@usno.navy.mil).

**Astronomical Chronology:** Prof Alexander Gurshtein (Russia/USA, Chair), Dr Christine Allen (Mexico), Prof Adriaan Blaauw (Netherlands), Dr Teije de Jong (Netherlands), Prof Rajesh Kochhar (India). *Contact person:* Prof Alexander Gurshtein, Mesa State College, Box 2674, Grand Junction, CO 81 502, USA (e-mail: agurshtein@hotmail.com).

**Historical Instruments:** Prof Nha Il-Seong (Korea, Chair), Dr Juergen Hamel (Germany), Mr Kevin Johnson (UK), Dr Tsuko Nakamura (Japan), Dr Wayne Orchiston (Australia), Dr Sara Schechner (USA). *Contact person*: Prof Nha Il-Seong, The Nha Il-Seong Museum of Astronomy, San-133 Gamchon-myon, Yechon-gun, Kyongbuk 757-910, Korea (e-mail: SLISNHA@chollian.net).

**Transits of Venus:** Dr Steve Dick (USA, Chair), Dr Hilmar Duerbeck (Germany), Dr Robert van Gent (Netherlands), Prof David Hughes (UK), Mr Willie Koorts (South Africa), Dr Wayne Orchiston (Australia), Dr Luisa Pigatto (Italy). *Contact person:* Dr Steven J. Dick, U.S. Naval Observatory, 3450 Massachusetts Ave NW, Washington DC 20392-5420, USA (e-mail: dick.steve@usno.navy.mil).

Please direct all specific inquiries to the chairs of the relevant WGs, and any general WG-related inquiries to the in-coming President, Prof Alexander Gurshtein (agurshtein@hotmail.com).

Wayne Orchiston C41/ICHA Secretary

# I. <u>The C41/ICHA Transit of Venus Working Group. 2: Lord Lindsay's Transit of Venus Expedition to Mauritius 1874</u>

Of the many expeditions that set out from Britain to observe the Transit of Venus in 1874, that organised by Lord (James Ludovic) Lindsay (later Earl of Crawford) from the Dun Echt Observatory in Scotland to the island of Mauritius was unique in certain respects: it was privately funded, and it carried out an independent and in part experimental programme of observation.

Dun Echt Observatory, which functioned from 1872-1892 on the country estate of the Crawford family near Aberdeen, was the dream creation of Lindsay, a talented independent astronomer of professional standing. Lindsay's immediate ambition, when he began to plan his observatory in 1872, was to observe the approaching transit of Venus, and preparations for the Transit went hand in hand with the furbishing of the new observatory. He recruited the brilliant and enthusiastic David Gill, and together they set about acquiring a variety of instruments, with particular reference to the needs of the Transit. They decided that their principal instrument for that event should be a heliometer, the favoured instrument of the official German and Russian expeditions. Lindsay's expedition also made provision to contribute by the photographic method, and was equipped with much auxiliary apparatus, including a transit instrument, chronometers, and photographic materials.

The site on Mauritius was provided by a resident of the island, Eduard de Chazal, on his estate of Belmont, sixteen miles from Port Louis (latitude 20° S). The scientific team consisted of Lord Lindsay, David Gill, Ralph Copeland, on leave from Dunsink Observatory, and Lord Lindsay's photographer Henry Davis. A horizontally mounted telescope of 40 feet focal length was employed to photograph the transit, while Gill was responsible for using the heliometer in the manner adopted by the German astronomers. The transit, on 1874 December 9, was observed according to plan. The data were reduced and pooled with those of the other British expeditions but not separately published. As with other expeditions worldwide, the results were disappointing.

The real significance of the Mauritius expedition lay in Gill's second heliometer programme. It consisted in observing the minor planet Juno, which was in opposition one month previously, on 5 November, for the purpose of deriving the solar parallax by the diurnal method. Gill, who had travelled in advance with the bulk of the expedition's equipment, was installed in Mauritius in good time, but the heliometer, which was transported by Lindsay in his yacht, unfortunately arrived late. Gill's observations began only on November 12, continuing until November 30. The span was enough, however, to provide a good result and to establish the method.

The diurnal method of observing the parallax of a planet, and hence of the Sun, had been suggested as far back as 1857 by G.B. Airy, but had not previously been put into practice. Instead of observing the planet from widely separated positions on the surface of the Earth, the astronomer observes it from the same location after an

interval of time, allowing the rotation of the Earth to provide the baseline for parallax. This requires to be done when the planet is in opposition, the observations being made in the evening and again in the morning. The idea of using a minor planet for parallax work instead of the nearest planets, Mars and Venus, originated with J.G.Galle in 1872, who pointed out that a minor planet, though more distant, had the advantage of a star-like appearance, allowing its position to be more precisely determined. He tried the method with the minor planet Flora at its opposition in 1873 October, with the cooperation of a number of observatories throughout the world, including Dun Echt. Gill's procedure was thus original, in that it combined for the first time the diurnal method with the use of a minor planet, and furthermore, used, unusually, the heliometer for the observations. The resulting solar parallax (8.77") was published in 1877 (Lindsay and Gill, 1877).

The Juno work on Mauritius confirmed the advantages of the diurnal method of parallax determination, and of minor planets for parallax purposes. It also, as far as Gill was concerned, sealed his preference for the heliometer as a positional instrument. It was the springboard for Gill's successful observations of Mars (again with Lindsay's heliometer) at opposition in 1877, and his subsequent important series of collaborative observations of minor planets, leading to improved values of the solar parallax (listed by Hughes, 2001).

An account of Lord Lindsay's Transit of Venus expedition is included in Brück's history of Dun Echt Observatory (Brück, 1992). Lord Lindsay's historic heliometer is preserved at the Royal Observatory Edinburgh.

Lord Lindsay has recorded that the site of the Transit of Venus instruments at Belmont on Mauritius was given by the owner as a gift to the Government for preservation. The present writer does not know if the site is still marked, but would like to draw it to the attention of the Working Group.

The site of the Dun Echt Observatory is marked by an engraved stone, placed there by the 26th Earl of Crawford (formerly Lord Lindsay) in 1892.

#### REFERENCES

Brück, H.A., 1992. Lord Crawford's Observatory at Dun Echt 1872-1892. *Vistas in Astronomy* **35**: 81-138.

Hughes, David W., 2001. Six stages in the history of the astronomical unit. *Journal of astronomical History and Heritage* **4** (1):15-28.

Lindsay, [Lord] and Gill, David, 1877. *Dun Echt Observatory Publications*, Volume 2. Dun Echt Observatory.

M.T.Brück, 'Craigower', Penicuik, Midlothian EH26 9LA, Scotland, UK. mt.bruck@virgin.net

### J. Publication of the 2000-2003 Triennial Report

Members will be pleased to learn that the C41/ICHA Triennial Report included in the 2002 December issue of this *Newsletter* (pages 10-27) has been published *in toto* by the IAU. The reference is:

Stephenson, F. Richard, and Orchiston, Wayne, 2002. Commission 41: History of Astronomy & the Inter-Union Commission for History of Astronomy (ICHA). In: Rickman, Hans (ed.). *Reports on Astronomy, Vol. XXVA*. San Francisco, ASP. Pp. 439-452.

Wayne Orchiston (C41/ICHA Secretary)

#### K. Time to move on

It is time for new challenges, and so I have decided to step down from the C41/ICHA Organizing Committee and from the Editorial Board of this *Newsletter* in order to devote the next three years to our Archives, Historical Instruments and Transits of Venus Working Groups, and also to the Historic Radio Astronomy Working Group when this is formed. For those with a serious research interest, I believe that the WGs offer exciting collaborative possibilities. In addition, through the Archives, Historical Instruments and Historic Radio Astronomy WGs, the IAU has a vital role to play in identifying, documenting and organizing the preservation of significant astronomical records, telescopes and ancillary instrumentation, and historically-significant surviving radio telescopes before it is too late and these priceless elements of our international astronomical heritage are lost to us forever.

As Secretary of C41/ICHA, I can look back on the last three years with some sense of satisfaction, but tinged at time with a degree of frustration. Three years ago, no-one could have foreseen the inordinate amount of time and effort that would be required in order to formalize our relations with the International Union for History and Philosophy of Science (Division of History of Science), culminating in the formation of the Inter-Union Commission for History of Astronomy (ICHA). However, the final outcome has proved to be very satisfying, and the resulting membership drive has seen the number of historians of astronomy associated with the IAU rise from 200 to around 700. In the process we have given just recognition to the broad spectrum of astronomical history by targeting specific 'niche markets', including those with research interests in old telescopes, archaeo-astronomy, ethnoastronomy, applied historical astronomy, and the history of radio astronomy.

Another triennium highlight for me was last year's conference on "Astronomical Instruments and Archives from the Asia-Pacific Region", which meant my first visit to Korea. The publication of the conference Proceedings in just a few months time will bring this exciting, if extremely time-consuming, venture to a successful close. I also feel that one other major accomplishment of the current Organizing Committee has been the development of a wide-ranging history of astronomy program at next month's Sydney General Assembly, designed to accommodate all research tastes. This is far and out the most ambitious history program ever offered at a GA, and it is

gratifying to see all of the Science and Working Group Meetings over-subscribed and to note that this program has attracted many first-timers to a GA - despite the international security and medical circumstances of recent years, and the expense of getting to and staying in Sydney.

I also regard the development of this Newsletter as another important accomplishment of the Commissions during the triennium, and although there will be no more contributions from me penned in the name of "Secretary" or "Sydney GA History Program Co-ordinator", instead there will be future articles - generally co-authored - reporting on Working Group developments and achievements.

The formation of new Working Groups at the Manchester GA was undoubtedly an important step for the profession, and although the effort that we collectively had to devote to founding the ICHA and planning the Korean and Sydney GA programs may have taken our main focus away from these groups, some valuable progress was made. With increased resourcing and commitment, it will be interesting to see just how much can be achieved over the next triennium.

Apart from the Working Groups, C41/ICHA has much to look forward to over the coming triennium. Next year there are three different international conferences with which we are associated; in 2005 there is the General Assembly of the IUHPS, where we will offer our first history of astronomy program; and then there is the 2006 IAU General Assembly in Prague to start thinking about. The quest for a History of Astronomy Division within the IAU must also remain one of our chief triennial objectives. Looking further ahead, in-coming President, Alex Gurshtein, has an ambitious package in mind for the celebration of the history of the telescope in 2009.

I could not end this little 'farewell' piece without thanking members of the C41/ICHA Organizing Committee for their help and support during the past three years, and I particularly appreciate those regular telephone calls from Richard Stephenson, the unstinting kind and wise council offered by former Presidents, Suzanne Débarbat and Steve Dick, and the wonderful efforts of our *Newsletter* Editor, Ileana Chinnici. Finally, I would like to thank Brian Boyle and staff at the Anglo-Australian Observatory, who made me welcome and provided a comfortable home-base for my IAU-related activities over the last three years. This is much appreciated.

Wayne Orchiston C41/ICHA Secretary

# L. Journals and Publications

# ✓ Journal of Astronomical History and Heritage

Volume 5, Number 2 (2002 December):

• **Bracewell, R.A**.: The discovery of strong extragalactic polarization using the Parkes Radio Telescope. (pp. 107-114)

- Liu Ci-yuan: Analysis of dates and lunar phases in *Wucheng*. (pp. 115-121)
- **Pettersen, B.R.**: Christopher Hansteen and the first observatory at the University of Oslo, 1815-28. (pp. 123-134)
- Theodossiou, E.Th., Niarchos, P.G., Manimanis, V.N., and Orchiston, W.: The fall of a meteorite at Aegos Potami in 467/6 BC. (pp. 135-140)
- **Pigatto, L., and Zanini, V.:** The 1900-1 opposition of 433 Eros, the solar parallax, and the contribution of Padova Observatory. (pp. 141-153)
- Beech, M.: The mechanics and origin of cometaria. (pp. 155-163)
- **Shankland, P.D., and Orchiston, W.:** Nineteenth century astronomy at the U.S. Naval Academy. (pp. 165-179)
- **Debarbat, S.**: The IAU, astronomical archives and Commissions 41 and the ICHA. (pp. 181-183)
- Orchiston, W., Dick, S.J., Gurshtein, A., Kochhar, R., and Pigatto, L.: The C41/ICHA Transits of Venus Working Group. 1: An introduction. (pp. 185-188)

Volume 6, Number 1 (2003 June)

- Osterbrock, D.E.: Don Hendrix, master Mount Wilson and Palomar Observatories optician. (pp. 1-12)
- Satterthwaite, G.E.: Airy's zenith telescopes and "the birth-star of modern astronomy". (pp. 13-26)
- Chapman, A.: Porters, watchmen, and the crime of William Sayers: the non-scientific staff of the Royal Observatory, Greenwich, in Victorian times. (pp. 27-36)
- **Brück, M.:** An astronomer calls: extracts from the diaries of Charles Piazzi Smyth. (pp. 37-45)
- Stephenson, F.R., and Green, D.A.: Was the supernova of AD 1054 reported in European history? (pp. 46-52)
- Liu Ciyuan, Liu Xueshun, and Ma Liping: Examination of early Chinese records of solar eclipses. (pp. 53-63)
- **Brück, M.:** The C41/ICHA Transits of Venus Working Group. 2: Lord Lindsay's transit of Venus expedition to Mauritius 1874. (p. 64).

For further information see the web site: http://www.astralpress.com.au

John Perdrix (Managing Editor) Astral Press, PO Box 107, Wembley, WA 6913, Australia Tel +61 8 9387 4250, fax +61 8 9387 3981, e-mail:astral@iinet.net.au and

Wayne Orchiston (Papers Editor)

Anglo-Australian Observatory, PO Box 296, Epping, NSW 2121, Australia E-mail: wo@aaoepp.aao.gov.au

#### ✓ Rittenhouse (Astronomical papers)

Vol. 16, 2002

- Rand Evans, Morse's Register and the American Method, pp. 65-83.
- **Alice Walters**, Importing science in the early Republic: Union College's "first purchase" of instruments and books, pp. 85-107.

Vol. 17, 2003

- Randall C. Brooks, Electron Micrographs of Spectroscopic Gratings, pp. 27-44
- **M. Eugene Rudd**, Instrument Collection Profile: University of Nebraska, pp. 45-55.

Web page: <a href="www.rittenhousejournal.org">www.rittenhousejournal.org</a> (includes cumulative index to all 15 volumes)

Editor: Dr. Randall C. Brooks, e-mail: RBrooks@nmstc.ca or Brooks@iStar.ca

Randall Brooks, Curator, Physical Sciences & Space Canada Science & Technology Museum (Museum URL: <u>www.science-tech.nmstc.ca</u>) PO Box 9724, Stn. T, Ottawa ON K1G 5A3, CANADA Tel. 613-990-2804, Fax 613-990-3636

#### ✓ Acta Historica Astronomiae

The following titles in this series of books appeared in 2002:

- Vol. 14: Astronomie von Olbers bis Schwarzschild, Nationale Entwicklungen und internationale Beziehungen im 19. Jahrhundert (Astronomy from Olbers to Schwarzschild, National development and international relations in the 19th century, in German), edited by Wolfgang R. Dick and Juergen Hamel. This book is devoted mainly to astronomy in Germany and Chile and to international relations of German astronomers.
- Vol. 15 comprises the 5th issue of the yearbook "Beitraege zur Astronomiegeschichte" (Contributions to the History of Astronomy) with research papers, short contributions, and book reviews. One paper (on the discovery of Eros) is in English, the others are in German.
- Vol. 16: Tycho Prahe and Prague: Crossroads of European Science. Proceedings of the International Symposium on the History of Science in the Rudolphine Period, Prague, 22 25 October 2001, edited by John Robert Christianson, Alena Hadravova, Petr Hadrava and Martin Solc. Nearly all contributions are in English.

- Vol. 17: Zwischen Copernicus und Kepler M. Michael Maestlinus Mathematicus Goeppingensis 1550-1631, edited by Gerhard Betsch and Juergen Hamel. These are the Proceedings of a Colloquium devoted to the astronomer Michael Maestlin, in German language.
- Vol. 2 (J. Hamel, Die astronomischen Forschungen in Kassel unter Wilhelm IV. The astronomical research in Kassel at the time of Wilhelm IV, in German) appeared as a 2nd, improved edition.

Information about this series in general and about previous volumes was published in ICHA Newsletter No. 2.

Much more information including Tables of Contents and English abstracts and on how to order is available at <a href="http://www.astrohist.org/aa/acta/">http://www.astrohist.org/aa/acta/</a> or from the series editors (Wolfgang R. Dick, e-mail: <a href="wdick@astrohist.org">wdick@astrohist.org</a>, and Juergen Hamel, c/o Archenhold-Sternwarte, Alt Treptow 1, 12435 Berlin, Germany, e-mail: <a href="mailto:jhamel@astw.de">jhamel@astw.de</a>).

Wolfgang R. Dick

#### Books 2001/2003

- Albers, H. (ed.), 2001. Maria Mitchell: A Life in Journal and Letters. College Avenue Press.
- Ansari, S.M.R. (ed.), 2002. History of Oriental Astronomy. Dordrecht, Kluwer.
- **Buffoni, L., and Proverbio, E. (eds.)**, 2002. Arminio Nobile e Giovanni Virginio Schiaparelli: Corrispondenza (1868-1894), Milano, 98 pp. (in press).
- **Heck, A.**, 2003. Information Handling in Astronomy Historical Vistas. Dordrecht, Kluwer.
- **Hoskin, M**., 2003. The History of Astronomy. A Very Short Introduction. Oxford, OUP.
- **Voelkel, J. R.**, 2001. The composition of Kepler's Astronomia Nova. Princeton University Press.

# Some research papers by C41/ICHA members - 2001/2003

- **Kak S.**, "Babylonian and Indian Astronomy: Early Connections," *Los Alamos Archive*, Jan 31, 2002. <a href="http://arXiv.org/abs/physics/0301078">http://arXiv.org/abs/physics/0301078</a>
- Orchiston, W., 2002. From Crossley to Carter: the life and times of an historic Cooke refractor. *Journal of the Antique Telescope Society* **24**: 9-24.
- Orchiston, W., 2002. Tebbutt vs Russell: passion, power and politics in nineteenth century Australian astronomy. In Ansari, S.M.R. (ed.). *History of*

- Oriental Astronomy. Dordrecht, Kluwer (IAU Joint Discussion 17). Pp.169-201.
- Orchiston, W., 2003. J.F. Skjellerup: a forgotten name in South African cometary astronomy. *Monthly Notices of the Astronomical Society of Southern Africa* **62**: 54-73.
- Orchiston, W., 2003. The Mount Stromlo fires: a major heritage loss for Australian astronomy. *Journal of the British Astronomical Association* 113: 73-74
- Orchiston, W., 2003. Passion and patronage: the Afro-Australian astronomy of Robert Thorburn Ayton Innes. *Monthly Notices of the Astronomical Society of Southern Africa* **62**: 4-13.
- **Proverbio, E. and Calledda, P.**, 2002. Sugli orientamenti e sulle visuali di pozzi sacri esistenti nella Sardegna centro-meridionale: primi rilievi. *Rivista Italiana di Archeoastronomia*, 1 (in press).
- **Shankland, P., and Orchiston, W.**, 2002. Nineteenth century astronomy at the U.S. Naval Academy. *Journal of Astronomical History and Heritage* **5**: 165-179.
- Stephenson, F.R., and Orchiston, W., 2002. Commission 41: History of Astronomy & the Inter-Union Commission for History of Astronomy (ICHA).
   In Rickman, H. (ed.). Reports on Astronomy, Vol. XXVA. San Francisco, ASP. Pp. 439-452.
- Stoev, A., Muglova, P., Gumarov, M., Stoeva, M., Tashev, Y., Videnov, B. 2001. Spatial orientation and acoustic reverberation in the Tahgarduk kaya cave sanctuary, near the Ilinitsa village, Kurdjali district, Perperek I, Perperek and the microregion around it, complex investigation of the thousand years multireligious centre in East Rhodopes, New Bulgarian University, 2001, pp. 226-235.
- Stoev, A., Muglova, P. and Stoeva, M., 2001. Statistical stability in the archaeoastronomical interpretation of rock cut sanctuaries in karst, Environment and cultural heritage Ist National conference, Proceedings, in press.
- Stoev, A. and Muglova, P., 2002. Seasonal meridional Sun culminations in the cult practices of the archaic societies, National astronomical conference, 31 May 1 June 2002, Shumen, Proceedings.
- Stoev, A., Muglova, P., Stoeva, M., Tashev, Y., Videnov, B., Velkov, R. and Velkov, V., 2002. An archaeoastronomical investigation of the Harman kaya rock-cut megacomplex in the region of Dolna Chobanka village, Momchilgrad municipality, *Thracology news*, Institute of Thracology, BAS (in press).
- Stoev, A and Muglova, P., 2002. Archaeoastronomical interpretation of the Tatichev kamen rock-cut monument near the Kokino Village, Staro Nagorichane municipality, Macedonia, *Pirayhme*, vol.2 (in press, in Bulgarian and in English).

- Stoeva, M., Stoev, A., Muglova, P. and Gumarov, M., 2002. Sun meridional culminations and sound resonanses in the Tahgarduk kaya cave sanctuary, near the Ilinitsa village, Kurdjali district, Speleo 2002 VIII National conference on speleology, 11-13 October 2002, Stara Zagora, in press.
- Theodossiou, E.Th., Niarchos, P.G., Manimanis, V.N., and Orchiston, W., 2002. The fall of a meteorite at Aegos Potami in 467/466 BC. *Journal of Astronomical History and Heritage* 5: 135-140.

#### M. News

#### **M** Bicentennial of Bogota Observatory

The observatory in Bogota, Colombia, celebrates its bicentennial this year. Founded in 1803, the 'Observatorio astronomico de Santafe de Bogota' is the oldest permanent structure in the Americas that was designed specifically for astronomical observations with a fixed telescope.

A short illustrated essay describing some highlights of the first 200 years of this observatory, and its predecessors, has been prepared by Antique Telescope Society and ICHA member, Peter Abrahams, and is available at the following web site: <a href="http://home.europa.com/~telscope/bogota.txt">http://home.europa.com/~telscope/bogota.txt</a>

(Adapted from a report in HASTRO-L)

#### **2003** Scientific Instrument Symposium

The Mariners' Museum, Newport News, Virginia (USA), 30 September - 5 October 2003

The 2nd circular, including registration and hotel reservation forms, for the 2003 Scientific Instrument Symposium, to be held at The Mariners' Museum, Newport News, Virginia, from 30 September - 5 October, is now available at <a href="http://www.mariner.org/sic2003/information.html">http://www.mariner.org/sic2003/information.html</a> This is the same site as the 1st circular. Those of you who have submitted a paper need not do so again. Please register, and include a summary of your talk.

Willem Mörzer Bruyns

# Société Européenne pour l'Astronomie dans la Culture (SEAC)Meeting 2003

University of Leicester (UK), 11-12 August 2003

The 2003 meeting of the Société Européenne pour l'Astronomie dans la Culture (SEAC) will be held at the University of Leicester, United Kingdom on 11-12

August, following the INSAP-4 meeting being held in Oxford. This is not a full SEAC meeting, instead, this short meeting will highlight the role of young people in archaeoastronomy through two special sessions:

Young archaeoastronomers: Archaeoastronomers under the age of 30(-ish), including research students or others doing research in the field, are invited to give presentations on their work. Come and meet established people in the field and make international contacts! Proposals for presentations in this session should be made to Clive Ruggles (<a href="rug@le.ac.uk">rug@le.ac.uk</a>) as soon as possible. An abstract of 200-300 words was required by 1 April 2003.

Education round table: Clive Ruggles, the organiser of this meeting, will chair an informal discussion on education in archaeoastronomy focusing on attracting young people into the discipline and the problems of multidisciplinary training. Please contact Clive directly if you would are interested in participating as a panelist on the round table.

For further details on the conference see:

http://www.le.ac.uk/archaeology/rug/SEAC03/

For general information on SEAC see: http://www.iac.es/seac/seac.html

Steve McCluskey

# ## The History of Science Society's 2003 Annual Meeting, Call for papers Cambridge, Massachusetts (USA), 20-23 November 2003

The History of Science Society is soliciting proposals for sessions and contributed papers for its annual meeting. Submissions on all topics are requested. Proposals must be submitted through the HSS Web site (<a href="www.hssonline.org">www.hssonline.org</a>) or on the annual meeting proposal forms that are available through the HSS Executive Office. All proposals must be received by 1 April 2003.

History of Science Society, Box 351330, University of Washington, Seattle, WA 98195-1330; phone: 206-543-9366; fax: 206-685-9544; e-mail: meeting@hssonline.org.

Scholars are asked to circulate this announcement to colleagues who are not members of HSS but who may be interested in presenting a paper at the annual meeting. Particularly encouraged are session proposals that include: a mix of men and women; a diversity of institutional affiliations; and/or a balance of professional ranks (e.g. mixing senior scholars and graduate students). Only one proposal per person may be submitted.

Before sending a proposal to the HSS Office, please read the "Guidelines for Selecting Papers and Sessions," which can be found on the HSS Web site under the "Call for Papers"; these guidelines will be used in determining the acceptability of session and paper proposals for the Cambridge meeting.

For further information, please contact Jay Malone or the 2003 Program Chairs, Mary Terrall (UCLA) and Joan Richards (Brown University).

(From: HASTRO-L@LISTSERV.WVU.EDU)

### XXX Symposium of the International Committee for the History of Technology, ICOHTEC 2003

St. Petersburg - Moscow (Russia), August 21-26, 2003

Organizers of the Symposium: International Committee for the History of Technology, St. Petersburg Polytechnic University, Institute of the History of Science and Technology, Russian Academy of Sciences. The sessions are held in St. Petersburg Polytechnic University (August 21st-24th) and in the Moscow Polytechnic Museum (August 25th-26th).

International Committee for the History of Technology: Alexandre Herlea, President (e-mail: <u>Alexandre.Herlea@wanadoo.fr</u>, <u>herleaalex@yahoo.com</u>); Barton Hacker, Head of the Program Committee (e-mail: <u>hackerb@si.edu</u>); Hans-Joachim Braun, Secretary-General (e-mail: <u>hjbraun@unibw-hamburg.de</u>); Vasily Borisov, Member of the Executive Committee, Supervisor of the 30th Symposium (e-mail: borisov@ihst.ru).

Conference address:

XXX Symposium ICOHTEC 2003 International Relations Administration, 29, Polytechnicheskaya, St. Petersburg, 195251, Russia e-mail: mail@ums.stu.neva.ru

Tel / Fax : /7/ (812) 247 2088

#### // Titan - From Discovery to Encounter

(International Conference to commemorate the 375th birthday of Christian Huygens) ESTEC Conference Centre, Noordwijk (The Netherlands), 13-17 April 2004

Scientific Programme Committee:

Dennis Matson (<u>dmatson@jpl.nasa.gov</u>), Cecille Ferrari (<u>Cecile.Ferrari@cea.fr</u>), Tobias Owen (<u>owen@ifa.hawaii.edu</u>), Fabrizio Bonoli (<u>bonoli@bo.astro.it</u>), Fokko Dijksterhuis (<u>f.j.dijksterhuis@wmw.utwente.nl</u>), Cees Grimbergen (<u>grimberg@doge.nl</u>), Albert van Helden (<u>A.VanHelden@phys.uu.nl</u>), Athena Coustenis (<u>Athena.Coustenis@obspm.fr</u>), Jean Pierre Lebreton (<u>Jean-Pierre.Lebreton@esa.int</u>), John Zarnecki (<u>J.C.Zarnecki@open.ac.uk</u>).

Christiaan Huygens was one of the most respected leading European scientists in the 17th century. He was the first of what we would today call a "scientific director" of the Académie Française. One highlight in his career was the discovery of Saturn's largest moon, Titan, in 1655.

For ESA, the highlight of 2004 and early 2005 will be the arrival of the NASA/ESA Cassini-Huygens spacecraft at Saturn and the release of the Huygens probe into the atmosphere of Titan. The aim of the conference is to bring together historians and space scientists to discuss:

- Christiaan Huygens, the person, the scientist, his relations with other scientists in the 17th century, like Cassini, Descartes, Newton, etc.
  - Observations of Saturn and its moons since the 17th century.
- The Cassini-Huygens mission and the latest observations on the way to the encounter of Titan.

The programme will consist of invited papers, contributed papers, and posters. The intention is to publish the proceedings in the ESA SP series.

Schedule:

Call for papers: April 2003; Deadline for paper submission: September 2003;

Final Programme: December 2003 Contact: Henk.Olthof@esa.int

Conference Webpage: <a href="http://sci2.esa.int/huygens/conference/">http://sci2.esa.int/huygens/conference/</a>

(From: HASTRO-L@LISTSERV.WVU.EDU)

#### **A** Publications On-Line

#### ★ Cataloghi di strumenti scientifici nella Biblioteca dell'Osservatorio Astronomico di Palermo

The collection of scientific trade catalogues held at the Osservatorio Astronomico di Palermo is being scanned and put on the internet. The project should be completed by December 2003.

Over one third of the collection (A-H) is already on the net at the following

address: http://www.astropa.unipa.it/biblioteca/Strumenti/strum\_list.html

D. Randazzo, Librarian Osservatorio Astronomico di Palermo Giuseppe S. Vaiana Piazza del Parlamento, 1 90134 Palermo (Italy) E-mail: donata@astropa.unipa.it

#### **CONTACT**

Contributions to the Newsletter can be sent to:

Dr. Ileana Chinnici c/o Osservatorio Astronomico di Palermo G. S. Vaiana Piazza del Parlamento, 1 90134 Palermo (ITALY)

tel. 39091233443, fax 39091233444 E-mail: <a href="mailto:chinnici@oapa.astropa.unipa.it">chinnici@oapa.astropa.unipa.it</a>

*Editorial Board*: Dr. Ileana Chinnici (Italy), Prof. Alex Gurshtein (Russia), Dr. Wayne Orchiston (Australia), Prof. Richard Stephenson (United Kingdom).

36