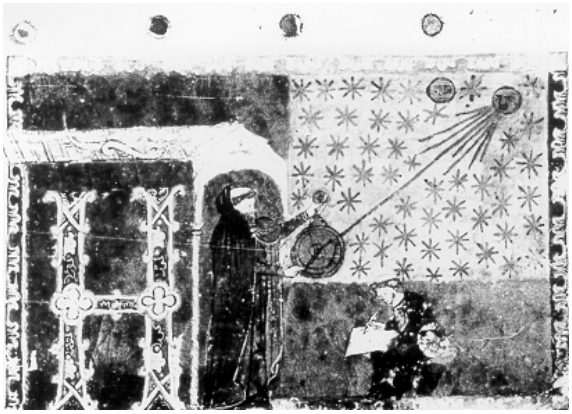
International Union
of History &
Philosophy of
Science



CHAMA NEWSLETTER

Commission for History of Ancient and Medieval Astronomy
Editors: S.M. Razaullah Ansari, Anne Tihon

Vol.1, N° 2; Vol. 2, N°1 October 2003

Contents

Foreword

It is a pleasure to present to the members of the Commission the new issue of its Newsletter. We are happy to offer here Notices on six books, two of which are Festschrifts of renowned historians of astronomy, viz., David Pingree (Brown University) and Bernard Goldstein (University of Pittsburgh). We look forward to their speedy publication. Besides these, 12 members of our Commission have forwarded to us the list of their recent publications. These are undoubtedly precious information for all of us. It is a pleasure to acknowledge their cooperation.

Out of the News and Announcement columns, I pick up for your specific notice the information concerning two important international meetings, namely, 22nd International Congress of History of Science (ICHS), to be held in July 2005, in Beijing (China), and 5th International Conference of Oriental Astronomy, to be held in Oct. 2004, in Chiang Mai (Thailand). Let me say here a few words about each of them.

With reference to the communication of Prof. Dun Liu, Chairman Local Organising Committee of ICHS-2005, published herein, may I draw the attention of all members of CHAMA to the following?

As members may be aware, it is actually obligatory for each IUHPS Commission to organise a Symposium or a Sectional Meeting at each ICHS. I, therefore, propose that this Commission should also organise a Symposium at Beijing in 2005, on a topic in consonance with the aim and objective of CHAMA and also with the overall theme of 22nd Congress, that is, "Globalisation and Diversity: Diffusion of Science and Technology throughout History".

1. Kindly send me a couple of topics/titles of the proposed Symposium for consideration as early as possible.

2. Please suggest also a couple of names of invited speakers. In this connection, may I add that the LOC of 22nd ICHS has restricted the maximum number of speakers as 12. Further, the speakers are to be geographically well distributed.

3. It is stipulated that a Symposium will be allotted only 3 sessions, with 4 speakers / session. Kindly send me your comments and suggestions on this stipulation.

4. I feel that there should be at least 4 sessions, with 2 sessions/day (morning and afternoon) for our Symposium. Further, the talks should not be confined exclusively to only invited speakers. At least a session should be devoted to short papers, particularly by young historians of astronomy. This is very important for motivating them and thereby promoting the history of ancient and medieval astronomy among our younger generation. Please give your opinion in this respect also.

May I solicit in this connection the friendly cooperation and collaboration of all members of CHAMA and in fact all historians of ancient and medieval astronomy?

The idea to hold a series of international conferences on Oriental Astronomy was originally proposed by Prof. Il-Seong Nha (formerly at Yonsei Observatiory, Seoul/Korea) as early as 1990. Prof. Nha is an expert of Korean Astronomical instruments and has established recently a Museum of Korean Astronomy at Yechon (Korea). In 1992, Prof. Nha and some of his colleagues set up an International Organising Committee to hold the First International Conference of Oriental Astronomy (ICOA) which was held in Seoul during Oct.6 11 1993. The Second ICOA was held in Yingtan (Jiangxi Province of China) during Oct.15 21 1995, under the chairmanship of the late Prof. Bo Shuren. The Third ICOA was held in Fukuoka (Japan) Oct.27 30 1998 and the Fourth in Nanyang (China) Aug. 19 25 2001. To my knowledge Proceedings of the First ICOA have been published by Yonsei University, Seoul (Korea), Eds. I._S. Nha and F.R. Stephenson. That of the Third ICOA have been edited by Prof. M. Hirai and published by the University of Education, Fukuoka (Japan). The main objective for instituting this series of conferences was the fact that " the study of the Astronomy in the Orient is essential in order to obtain a global view of the development of astronomy through the ages." In this context, we hope that ICOA-5 in Thailand will also be a success.

Apropos: Oriental Astronomy. Edward Kennedy, one of the foremost living historians of Islamic Astronomy, once said: "If we delete (which we should not) the fundamental Hellenistic contribution, then we can forget the adjective. We can say that ancient and medieval astronomy was all Oriental". In contradistinction to this 'definition', CHAMA wishes to go beyond the adjective, Oriental, in order to include in its purview the whole astronomical heritage of the pre-modern period of human history. I may reiterate that the aim of CHAMA is not confined alone to mathematical astronomy of the Orient and Occident, but it should encompass in its scope also the astronomical history, even star lore, astronomical iconography, archeo-astronomy; in fact all ramifications of astronomy in human society in general. I hope that experts of these fields will also be attracted to this Commission in order to make CHAMA and its Newsletter truly broad-based. May I solicit the collaboration of all members of this Commission to popularise CHAMA among their colleagues?

S. M. Razaullah Ansari

The 22nd International Congress of History of Science, July 2005, Beijing. A Letter from the Chairman of the ICHS 2005 Local Organizing Committee

Dear Colleagues,

First I would like to convey my appreciation for the confidence placed in Chinese historians of science when Beijing was chosen as the site for the next International Congress of History of Science in 2005. In 2001, during the Congress in Mexico City, I promised historians of science from all parts of the world that we would do our best to organize and host the 22nd ICHS, following the examples of preceding successful Congresses which have set very high standards that we shall strive to meet. With this in mind, I am pleased to report the following details of how our plans are developing for the 22nd Congress, to be held in Beijing in 2005.

We have every reason to expect that globalization will be a key phenomenon of the 21st century, in the course of which science and technology will doubtless experience great advances and undergo profound transformations. Faced with the many challenges and opportunities that the advance of science and new high technologies will bring, local areas, individual countries, and even entire trans-national regions with different cultures and traditions will doubtless meet these challenges in different ways. As a result, scientific and intellectual leaders will make important judgments and decisions in light of their own experience and specific cultural contexts. In all such decision making, the history of science and technology should be factors of substantial importance. If we consider the history of civilization from the standpoint of macro-history, the tendency towards globalization can be seen as early as the 16th century. From then on, the diffusion of science and technology has been an accelerating factor in this process. It is no exaggeration to say that how a country or region regards its traditional culture and historical experience will serve to influence if not determine how it will keep up with the wave of international globalization. On the other hand, the diversity of cultures and different national or regional experiences are also important factors in the sustainable development of human existence. This is an axiom of human life inherent in our complex yet systematic social structures, just as the diversity of life-forms is important for the continuation of life in general. There can be no doubt that the diffusion of science and technology between different cultures offers the greatest and most promising prospects for the future advance of human civilization.

Consequently, for the 22nd International Congress of the History of Science, we have chosen the theme of "Globalization and Diversity: Diffusion of Science and Technology Throughout History" It is our hope that by devoting a series of plenary lectures, symposia and special sessions to the transmission, introduction, transformation, diffusion, absorption, and improvement of science and technology, both their present and past, we can approach a deeper understanding of the two concepts "globalization and diversification" and perhaps thereby consider better roads for moving towards future and wiser means of safeguarding and improving human existence and development.

We are also planning to organize a number of related activities that we are confident will be of considerable interest to historians of science. Above all, the year 2005 will mark the 100th anniversary of Albert Einstein's three great contributions to modern physics (molecular kinetic theory, the special theory of relativity, and his hypothesis of the quantum of light), and the 22nd ICHS will include plenary lectures, symposiums, and special exhibitions related to Einstein's Miraculous Year. We also welcome further suggestions on special academic activities we should plan to include as well in the Congress program. More detailed information about the organization of symposiums, special sessions, and scientific panels will be provided in the near future.

The review of all such proposals for special symposiums, sessions, and panels will be the responsibility of the International Program Committee, chaired by Professor Dr. Eberhard Knobloch of the Technical University of Berlin. The members of the Program Committee (in alphabetical order) are:

A. BIR (Turkey), M. BLAY (France), L. CORMACK (Canada), Christopher CULLEN (UK), Lorraine DASTON(Germany), Joseph DAUBEN(USA), C. DEBRU (France), S. FIGUEIROA (Brazil), J. FLEMING (USA), Peter GALISON(USA), P. GERDES (Mozambique), E. GIUSTI (Italy), Gerald HOLTON(USA), A. KELLER (UK), Young Sik KIM(Korea, H. KRAGH (Denmark), C. MEINEL (Germany), Alexei POSTNIKOV(Russia, R. RASHED (France), George SALIBA(USA), J. SAMSÓ (Spain), F. SATOFUKA (Japan), W. SHRUM (USA), Ida STAMHUIS£¨Holand), A.N. THAKUR£¨India), Yangzong WANG(China), E. VAMOS (Hungary), M. YANO (Japan), Tadashi YOSHIDA (Japan)

Meanwhile, the Secretariat of the Local Organizing Committee is already at work.

We can be contacted at the:

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This circular letter is only a preliminary announcement from the LOC for the 22nd ICHS. The first formal announcement of the Congress will be made before September 15, 2003. Meanwhile, we will continuously up-date information about the progress of our plans on the Congress website. Please note that the html address for our website has changed since the meeting in Mexico City, and it can now be accessed at: http://2005bj.ihns.ac.cn

On behalf of the Local Organizing Committee, I would be grateful if you would forward copies of this letter to anyone with a potential interest in the Congress, especially to organizations, local societies, programs, colleges, universities, and colleagues who do not regularly use e-mail or are unlikely to have access to the Congress website.

Please send us any specific suggestions you may have or advice about the Congress at your earliest convenience. We are very much looking forward to seeing you in Beijing in the summer of 2005!

Professor Dun Liu

Chair of the Organizing Committee for the 22nd ICHS

New Books

History of Oriental Astronomy

Proceedings of the Joint Discussion-17 at the 23rd General Assembly of the international Astronomical Union, organised by the Commission 41 (History of Astronomy), held in Kyoto, August 25-26, 1997

Editor: S.M. Razaullah Ansari

Publisher: Kluwert

Contents:

Publisher's Presentation of the Book:

This volume deals specifically with recent original research in the history of Chinese, Korean, Japanese, Islamic, and Indian astronomy. It strikes a balance between landmarks in the history of ancient and medieval astronomy in the Orient on one hand, and on the other the transmission of European astronomy into the countries of the Orient. All contributions are based on research by experts in this field.
The book also indicates the status of astronomy research in non-European cultural areas of the world. It will be of interest to historians of astronomy and science, and students of cultural heritage.

Giovanni Dondi dall'Orologio, *Tractatus astrarii, édition critique et traduction de la version A*, par Emmanuel POULLE, Travaux d'Humanisme et Renaissance CCCLXXI, Genève, Librairie Droz, 2003, 465 pp.

Author : E. Poulle
Publisher: Librairie Droz

This book gives an edition of the *Tractatus Astrarii* of Giovanni Dondi. This treatise explains the construction and the mechanism of an astronomical clock which was built by Dondi in the years 1365-1380. The clock was famous and thanks to the figures preserved in the manuscripts, several reconstructions have been made in modern time. One of them built under Poulle's directive can be seen at the Observatory of Paris. The present edition, with a French translation, is based on the manuscript of Padua, Bibl. Cap. D 39, which is probably the original version of Dondi himself. This manuscript has splendid figures, and a photographic reproduction of the manuscript has been printed in 1998 and offered to Emmanuel Poulle for his election to the French Académie des Inscriptions et Belles Lettres.

Francis DEBAUVAIS et Paul-André BEFORT, *Cueillir les Etoiles. Autour des Astrolabes de Strasbourg*, Strasbourg, ed. Ligne à suivre, 2002.

Author : Francis DEBAUVAIS, Paul-André BEFORT
Publisher: Ligne à suivre

This volume, published by the " Amis des instruments des sciences et des astrolabes ", contains a description and full analysis of the astrolabes of Strasbourg. The first one is an astrolabe produced in 1208 by the famous astrolabes-maker of Magrebh, Abu Bakr. The second one is a medieval astrolabe, made in Germany by an anonymous maker in 1481, and the third is an astrolabe made by Johann Krabbe in 1579. The book gives a very wide documentation for both specialists and non specialists. It is illustrated by splendid photos of the instruments and many other documents. A splendid book for bibliophiles, amateurs of ancient instruments and specialists.

Science and Technology in the Islamic World

Proceedings of the XXth International Congress of History of Science Liège July 20-26 1997 Vol. XXI Series: De Diversis Artibus (Collections of Studies from theInternational Academy of the History of Science) Brepols Turnhout (Belgium) 2002, 250 pages

Editor: S.M. Razaullah Ansari
Publisher: Brepols

The International Union of History and Philosophy of Science (IUHPS), which is adhered to

International Council of Scientific Union (ICSU), sponsors and organises the International Congress of History of Science (ICHS) every four years. IUHPS has a number of historical commissions (working-groups to coordinate research) and Inter-Union commissions, which in turn are commissions of IUHPS with other International Unions, e.g., IAU, IGU etc. Moreover, scientific meetings and workshops are also organised at ICHS under topical or thematic sections. At the 20th ICHS, which was held in Liège (Belgium), eighteen Scientific Sectional Meetings and forty-two Symposia were organised and held. In fact, nine historical commissions and four Inter-Union commissions organised one symposium each. However, the Commission of Science and Technology in Islamic Civilization -- President: Prof. S. M. Razaullah Ansari (Aligarh/India) for the period 1993-1997 -- organised three Symposia at Liège. Besides these Symposia, Section 3 of ICHS: Arabic and Islamic World organised a scientific meeting; the organisers were S. M. R. Ansari (India, Chairman), J.P. Hogendijk (The Netherlands), Y. Dold-Samplonius (Germany) and A. Allard (Belgium). Further, under the Special Section (SS3) another scientific meeting was organised: Islamic Science and Technology in Arabic-Speaking Countries, Central Asia and India; the organiser and chairman was S.M.R. Ansari (India).
The present book is actually a selection 19 talks or oral presentations delivered at the Symposia of the Commission of Islamic Science and Technology and particularly those at the meetings of Section 3 and SS3. Note the following break-up: astronomy-4, general-3, geometry-3, physics-3, optics-1, medicine-3, meteorology-1, Spanish Muslim-1. The contributors are: A. Açikgenç(Kuala Lumpur), C. Akdogan(Kuala Lumpur), M. Ali-Ahyaie (Tehran), H. Bellosta (Damascus), E. Calvo(Barcelona), M.Comes (Barcelona),G. de Young (Cairo), C. E.Ródenas and J.M. Quesada (Madrid), M. K.-Safadi (Villejuif/ France), E.S. Kennedy(USA), A. Konilov(Dushanbe), P. Lettinck (Kuala Lumpur), Irina Luther (Moscow), Roshdi Rashed (Villejuif/ France), M. Rius (Barcelona), M.M. Rozhanskaya (Moscow), P. Schmidl (Frankfurt a.M.), N. Stephan (Paris) and A. Touwaide (Madrid).

François CHARETTE, *Mathematical Instrumentation in Fourteenth-Century Egypt and Syria. The Illustrated Treatise of Najm al-Dîn al-Misrî*, Leiden and Boston: Brill, 2003 (Islamic Philosophy, Theology and Science. Texts and Studies, xxii + 422 + 136 pp. 16 b/w and 2 color plates. Bibliography and indices.

Author : François Charette
Publisher : Brill
Publisher's Presentation of the Book :

This volume contains the critical edition with English translation of a richly-illustrated Arabic treatise on the construction of over one hundred various astronomical instruments, many of which are otherwise unknown to specialists. It was composed by Najm al-Din al-Misri, a rather shadowy figure, in Cairo ca. 1330. The edition is accompanied by a detailed technical and historical commentary, which is framed as a self-standing essay on Islamic mathematical instrumentation. While this essay/commentary is mainly based on Najm al-Din's treatise, it also benefits from the consultation of a large number of previously unstudied manuscripts, and includes a discussion of all relevant sources from the period 800-1500.

Festschrift

In Preparation :

Astronomy and Astrology from the Babylonians to Kepler :

Essays Presented to Bernard R. Goldstein on the Occasion of his 65th Birthday

EDITORS : Peter Barker, Alan C. Bowen, José Chabás, Gad Freudenthal, and Y. Tzvi Langermann

SUMMARY :

- BRACK BERNSEN, L., *The Path of the Moon, the Rising Points of the Sun, and the Oblique Great Circle on the Celestial Sphere*
- ROCHBERG, F., *Luna Data in Babylonian Horoscopes*
- BRITTON, J. P., *On Corrections for Solar Anomaly in Babylonian Lunar Theories*
- BOWEN, A. C., *Cleomedes and the Measurement of the Earth*
- JONES, A., *A Posy of Almagest Scholia*
- PINGREE, D., *A Greek Ephemeris for 796, The Work of Stephanus the Philosopher ?*
- TIHON, A., *Une table grecque de vitesse lunaire (Laurentianus 28/26)*
- SMITH, M. A., *Ptolemy, Alhasen, and Ibn Mu'adh on the Problem of Atmospheric Refraction*
- BERGGREN, J. L., VAN BRUMMELEN, G., *Al-Samaw'al versus al-Kuhi on the Depression of the Horizon*
- JACQUART, D., *Bernard de Gordon et l'astrologie*
- KUNITZSCH P., TZVI LANGERMANN, Y., *A Star table from Medieval Yemen*
- SHANK, M. H., Rings in a Fluid Heaven : *The Equatorium-Driven Physical Astronomy of Guido de Marchia (fl. 1290-1310)*
- KING, D. A., *14th-Century England or 9th Century Baghdad ? New insights on the Origins of the Elusive Astronomical Instrument Called Navicula de Venetiis*
- FREUDENTHAl, G., " *Instrumentalism* " *and* " *Realism* " *as categories in the History of Astronomy : Duhem vs. Popper, Maimonides vs. Gersonides*
- GLASNER, R., *Gersonides'Unusual Position on* " *Position* "
- MANCHA, J. L., *Right Ascensions and Hippopedes : Homocentric Models in Levi ben Gerson's Astronomy I. First Anomaly*
- LEVY, T., *Immanuel Bonfils (XIVe s.) : Fractions décimales, puissances de 10 et opérations arithmétiques*
- CHABÁS, J., *Were the Alfonsine Tables of Toledo First Used by Their Authors ?*
- NORTH, J.D., *Winchester 1067*
- KREMER, R., *Wenzel Faber's Table for Finding True Syzygy*
- SWERDLOW, N. M., *Tycho Brahe's Early Lunar Theory and the Lunar Eclipse of 31 January 1599*
- BARKER, P., *How Rothmann Changed His Mind?*
- HON, G., *Putting Error to (Historical) Work : Error as a Tell-tale in the Studies of Kepler and Galileo*
- SAMSÓ, J., *Abrham Zacut and José Vizinho's Almanach perpetuum in Arabic (16th-19th C.)*

Ketuprakasha: Studies in the History of the Exact Sciences in Honour of David Pingree, edited by Charles Burnett, Jan Hogendijk, Kim Plofker and Michio Yano, Brill: Leiden, 2004.

EDITORS : Charles Burnett, Jan Hogendijk, Kim Plofker, Micho Yano

CONTRIBUTORS :

Babylonian World : Liz Brack- Bernsen, John Britton, Hermann Hunger, Erica Reiner, Francesca Rochberg, John Steele

Classical/Byzantine/medieval Latin World : , Charles Burnett, Alexander Jones, David Juste, Anna Tihon, Noël Swerdlow

Indian/Iranian World : S.M.R. Ansari, R.C. Gupta, Takao Hayashi, Takanori Kusuba, Setsuro Ikeyama, Christopher Minkowski, Antonio Panaino, Kim Plofker, Dominik Wujastyk, S.R. Sarma, Michio Yano

Medieval Islamic World : J.L. Beggren, Godefroid de Callatay, Benno van Dalen, Bernard Goldstein, Jan Hogendijk, David King, Jamil Ragep, George Saliba, Jacques Sesiano

CONTENTS PREVIEW:
- ANSARI, S.M.R., *Sanskrit Scientific Texts in Indo-Persian Sources, with Special Emphasis on Siddhantas and Karanas*
- BURNETT, C., *Arabic and Latin Astrology Compared ind the Twelfth Century: Firmicus, Adelard of Bath and "Doctor Elmirethi" ("Aristoteles Milesius")*
- de CALLATAŸ, G., *Astrology and Prophecy : The Ikhwan al-Safa' and the Legend of the Seven Sleepers*
- GOLDSTEIN, B., *A Prognostica based on the Conjunction of Saturn and Jupiter in 1166 [561 AH]*
- HAYASHI, T., *Two Benares Manuscripts of Narayana Pandita Bijaganitavatamsa*
- IKEYAMA, S., *A Survey of Rules for Computing the True Daily Motion of th Planets in India*
- JONES, A., *An "Almagest" Before Ptolemy's?*
- JUSTE, D., *Neither Observation nor Astronomical Tables: An Alternative Way of Computing the Planetary Longitudes in the Early Western Middle Ages*
- KING, D., *A Hellenistic Astrological Table Deemed Worthy of Being Penned in Gold Ink: the Arabic Tradition of Vetuus Valens's Auxiliary Function for finding the Lenght of Life*
- KUSUBA, T., *Indian Rules for the Decomposition of Fractions*
- RAGEP, F.J., *Ibn al-Haytham and Eudoxus: the Revival of Homocentric Modeling in Islam*
- SALIBA, G., *Reform of Ptolemaic Astronomy at the court of Ulugh Beg*
- SARMA, S.R., *Setting up the Water Clock for Telling the Time of Marriage*
- SESIANO, J., *Magic Squares for Daily Life*
- SWERDLOW, N., *Ptolemy's Harmonics and the "Tones of the Universe" in the Canobic inscription*
- TIHON, A., *Les Tables faciles de Ptolémée: une édition critique*
- VAN DALEN, B., *The Zij-i Nas?iri by Mahmu ibn 'Umar The Earliest Indian-Islamic Astronomical Handbook with Tables and its Relation to the 'Ala'i Zij*
- YANO, M., *Planet Worship in Ancient India*

Recent Publications and Projects of our Members

ANSARI, S.M. RAZAULLAH

- "European Astronomy in Indo-Persian Writings", in *History of Oriental Astronomy*, Ed. S. M. Razaullah Ansari, Kluwer (Dordrecht), pp.133-144.
- " Sanskrit Scientific Texts in Indo-Persian Sources, with Special Emphasis on Siddhantas and Karanas ", in *Ketuprakasha: Studies in the History of the Exact Sciences in Honour of David Pingree*, edited by Charles Burnett, Jan Hogendijk, Kim Plofker and Michio Yano, Brill: Leiden, expected by the end of 2003.
- " Hindu Scholars' Mathematical and Astronomical Writings in Indo Persian, And Assessment of Their Contributions to Medieval Indian Science ", in *Proceedings of the International Seminar on Science, Technology and Society*, held during Jan. 29-31, 2003, in Dept of History, University of Panjab, Chandigarh (India), in press.
- " Ghulam Hussain Jaunpuri - An Indian Mathematician and Astronomer ", in *Encyclopaedia Islamica*, published by The Da'iratul Ma'arif-i Islami Foundation, Tehran, Iran, expected in 2003.

DE JONG, TEIJE

- " More Greek Horoscopes from Kellis (Dakhleh Oasis) ", in *Zeitschrift für Papyrologie und Epigraphik*, Band 137 (2001), pp.203-214 (with K.A. Worp).
- " Early Babylonian Observations of Saturn: Astronomical Considerations ", in J.M. Steele and A. Imhausen eds., *Under One Sky*, Alter Orient und Altes Testament, Band 297 (2002), pp.175-192
- Project : The relation between observation and theory in Babylonian astronomy, The observation and theory of first and last visibility of stars and planets.

DE YOUNG, GREGG

- In Preparation: *John Greaves' ASTRONOMICA QUAEDAM: Indo-Persian Hay'a in Seventeenth Century Britain*.
Greaves published (in 1650) thePersian text of most of the first chapter of an anonymous Persian zij, alongwith Latin translation (recently reprinted by IGAIW in Frankfurt). Gregg De Young has translated this brief text into English, and written an introduction to JohnGreaves, his translation, and Greaves' historical introduction to the study of cosmology from Ptolemy to the seventeenth century. This includes introduction of new cosmological parameters drawn from the work of Nasir al-Din al-Tusi.Greaves' small treatise, one of the last of its kind to be published in Britain, shows the continuing conservatism of the astronomnical community longafter the beginning of the Scientific Revolution.

GULLBERG, STEVEN R.

- In preparation : *The Babylonian Astronomical Diaries : A Contextual Survey and Graphical Analysis of their Implied Reference System* (a thesis directed by F. Jamil Ragep, 2002).

OSHASHI, YUKIO

- " The Legends of Vasistha ", in *History of the Oriental Astronomy*, Dordrecht, 2002, pp. 75-82.
- " Originality and Dependence of Traditionnal Astronomies in the East ", in *Historical perspectives on East Asian Science, Technology and Medicine*, Singapore, 2002, pp. 394-405.

PROVERBIO, EDOARDO

- " La Società Italiana di Archeoastronomia: ricerche e ricadute culturali tra archeologia e astronomia pre-istorica e proto-storica in Italia ", in *Atti della LXVI Riunione della Sociatà Italiana per il Progresso delle Scienze*, Roma, 2001, pp. 169-183.
- " Ipotesi ed evidenze sull' esistenza di conoscenze astronomiche nelle comunità preistoriche dell'area europea ", in A*tti del III Convegno internazionale di Archeologia e Astronomia. L'uomo antico e il cosmo*, Accademia Nazionale dei Lincei, Roma, 2001, pp. 49-72.
- " La nascita della fisica solare ed il contributo di Pietro Tacchini allo sviluppo delle ricerche di astronomia solare in Italia " in *Atti della Fondazione Giorgio Ronchi*, LVI, 6 (2001), pp. 1165-1228.
- " Sugli orientamenti e sulle visuali di pozzi sacri esistenti nella Sardegna centro-meridionale : primi rilievi ", in *Rivista Italiana di Archeoastronomia*, N. 1, 2002, in print.
- " La Meteorologia dei fenomeni rimarchevoli e degli eventi estremi nel XVIII secole : teorie sull'origine e sul comportamento dei venti ", in *Atti del secondo Congresso nazionale di Archeoastronomia, astronomia antica e culturale e astronomia storica,* Roma, 2003, in print.

RAO, BALACHANDRA S.

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- *Ancient Indian Astronomy. Planetary Positions And Eclipses*, B.R.Publishing Corp.,Delhi, 2000.
- *Astrology. Believe it or not?*, Bangalore, 2000.

SARMA, NATARAJA

- " Measures of Time in Ancient India ", in *Endeavour* 15 (1991), p. 185.
- " Diffusion of Astronomy in the Ancient World ", in *Endeavour* 24 (2000), p. 157.

SARMA, SREERAMULA RAJESWARA

- " Yantraraja: the Astrolabe in Sanskrit ", in *Indian Journal of History of Science,* 34 (1999), pp.145-158.
- " Katapayadi Notation on a Sanskrit Astrolabe ", in *Indian Journal of History of Science*, 34 (1999) 273-287.
- " A Brief Introduction to the Astronomical Instruments preserved in Khuda Bakhsh Library, Patna ", in *Khuda Bakhsh Library Journal*, No. 118 (December 1999), pp. 1-10.
- (With S. M. R. Ansari), " Ghulam Hussain Jaunpuri's Encyclopaedia of Mathematics and Astronomy ", in S*tudies in History of Medicine and Science*, 16 (1999/2000), pp. 77-93.
- " Jyotisharaja at the Mughal Court ", in *K. V. Sarma Felicitation Volume*, Chennai, 2000, pp. 363-371.
- " Sultan, Suri and the Astrolabe ", in *Indian Journal of History of Science*, 35.2 (2000), pp. 129-147.
- " Some Indo-Persian Astronomical Instruments of the early Nineteenth Century " , in *Khuda Bakhsh Library Journal*, 123 (April 2001), pp. 1-16.
- " Measuring Time with Long Syllables: Bhaskara's Commentary on Aryabhatiya, Kalakriyapada 2 ", in *Indian Journal of History of Science*, 36.1-2 (2001), pp. 51-54.
- " Scientific Instruments: Evidence from Mughal Paintings " in: A. Jan Qaisar & S. P. Verma (ed), *Art and Culture : Painting and Perspective*, Abhinav Publications, New Delhi 2002, pp. 81-95.
- " Rule of Three and its Variations in India " in: Yvonne Dold-Samplonius et al. (ed), *From China to Paris : 2000 Years Transmission of Mathematical Ideas*, Steiner Verlag, Stuttgart 2002, pp. 133-156.
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News and Announcement

EVENTS

- 6th Latin-American Congress of History of Science and Technology , Buenos Aires, Argentina, 17-20 March 2004, organized by theLatin-American Society for the History of Science and Technology.
  General Theme: "20 years of Science and Technology Historiography in Latin-America"
  For further Informations: http://www.smhct.org/

- Call for Papers, BSHS Annual Conference 2004, 25-27 June 2004, Liverpool. Papers are invited on all areas of the history of science, technology and medicine. Suggestions for themed sessions are particularly welcome. Abstracts of Papers (max 250 words) should be sent to Dr Geoff Bunn, BSHS Programme Secretary, Department of Psychology, Liverpool Hope University College, Hope Park, Liverpool, L16 9JD or bunng@hope.ac.uk. Deadline for submissions: 31 January 2004.
  For further Informations: http://www.bshs.org.uk/conf/2004annual/

- Fifth British-North American Joint Meeting of the BSHS, CSHPS and HSS, 5-7 August 2004, Halifax, Nova Scotia, Canada. The program committee invites proposals for sessions on the theme of Circulating Knowledge. The theme has been chosen to encourage contributions on the following topics:
  - - The circulation of scientific knowledge between North America and Europe, and between these regions and elsewhere in the world.
    - The formation of scientific knowledge through geographical displacement in the course of exploration, migration, trade, and fieldwork.
    - The circulation of knowledge among scientific disciplines and research fields, and between science and other cultural domains.
    - The circulation of scientific knowledge between expert practitioners and public audiences.
    - The formation of scientific knowledge by translation between different languages, media, and forms of publication.
    - The part played in the creation of scientific knowledge by circulating texts, metaphors, images, objects, and artifacts.

  This announcement constitutes a call for papers. The meeting will be organized into sessions of three or four papers, with a commentator if appropriate. Proposals for complete sessions are encouraged, but proposals for individual papers will also be considered. Proposals may be in either French or English. Session organizers are urged to include speakers from more than one country.

  Proposal forms are available through the Executive Office of the History of Science Society at http://www.hssonline.org/ Proposals, including abstracts of approximately 250

words for each paper, are due at the HSS Executive Office by 15 December 2003, with notification of acceptance by the end of February 2004. For further details contact the HSS Executive Office at info@hssonline.org or the members of the program committee: Geoff Bunn, Lesley Cormack, or Jan Golinski. To contact the program committee, send an email to 3Societies@hssonline.org.

- The 22nd International Congress of History of Science, July 2005, Beijing
  For further Informations: http://2005bj.ihns.ac.cn
  See also " A Letter from the Chairman LOC, Prof. Dun Liu", published in this issue.

- The 5th International Conference of Oriental Astronomy, October, 2004, Chiang Mai, Thailand. This conference will go in parallel with the celebration of the 40th anniversary of Chiang Mai University, where our colleague Professor Boonraksar Soonthormthum is now the Dean of the Science College.

NEWS

- The *Newsletter* of the International Union of the History and Philosophy of Science Division of History of Science is now available at the following address : http://ppp.unipv.it/dhs/Pages/NEWSLETTER%20DHS1.pdf

- The International Union of the History and Philosophy of Science, Division of History of Science (IUHPS/DHS) invites submissions for the first DHS Prize for Young Scholars to be presented in 2005.

  The DHS Prize is awarded by IUHPS/DHS every four years to four young historians of science for their successful doctoral dissertations, completed after July 2001, which represent significant contributions to the History of Science. It is distributed as one prize in each of the following fields of focus: Western civilization, Islamic civilization, Far Eastern civilization, South Asian civilization, Ancient civilizations (not included in the above categories). Each prize consists of a certificate and coverage of travel and accommodation expenditures for participation in the IUHPS/DHS Congress. The prizes will be presented to their winners during the IUHPS/DHS Congress to be held in July 2005.

  DHS PRIZE COMMITTEE
  Examination and selection of the submissions will be performed by an international committee composed of the DHS President, the DHS Vice-President, the DHS Secretary General, and an international Jury of scholars and specialists.

  COMPETITION CALENDAR
  Submission deadline: 31 August 2004
  Prize Committee meeting: January 2005
  Award Ceremony: during the 2005 Congress.

  CONDITIONS

  Eligibility. Applicants must have a doctorate degree on the subject of history of science, awarded in or after July 2001.
  Scope. The entries must be on the history of science with a focus on one of the following fields: Western civilization, Islamic civilization, Far Eastern civilization, and South Asian civilization.

Language. Theses which are in any language other than English; a detailed summary in English, not longer than 20 pages, should be submitted.
Application procedure. Applications must be made in English and submitted to the Office of the DHS President at the address below by mail, to be received by 31 August 2004.
For complementary information, applications and submissions, please write to:
IUHPS/DHS President's Office (Prof.Dr. E. Ihsanoglu)
P. O. Box 24, Besiktas, 80692 Istanbul, Turkey
Fax: 90-212-258 43 65/ Tel: 90-212-260 07 17/ E-mail: ircica@superonline.com

- The Contents of the May 2003 Issue of *The Journal of History of Astronomy* is available at the following address: http://www.shpltd.co.uk/jha.html

- A Catalogue of Medieval Astronomical Instruments to CA 1500 : A catalogue of medieval Islamic and European astronomical instruments is currently being prepared at the Institute for the History of Science at Frankfurt University. It is hoped that this catalogue will serve as a useful research tool by providing critical descriptions of all historically-significant instruments, arranged according to provenance and type. The total number of instruments included in the catalogue will be about 550 astrolabes (some 300 Islamic and 250 European) and 250 quadrants, sundials and other instruments. Preview of the Table of Contents: http://www.uni-frankfurt.de/fb13/ign/instrument-catalogue-TOC.html

- The Renaissance of Astronomy in Baghdad in the ninth and tenth Centuries: A List of Publications, mainly from the last 50 years, by David King, is available at the following address: http://www.uni-frankfurt.de/fb13/ign/astronomy_in_baghdad/bibliography.html

OBITUARIES

ROGER LOUIS BILLARD (1922-2000)

Roger Billard, the historian of Indian astronomy, was born in Puteaux, in the outskirts of Paris, on 29 August 1922. As a boy he developed an interest in both astronomy and Oriental studies, but his youthful ambition was frustrated in German-occupied Paris.

Immediately after the war, he entered the École des Langues Orientales Vivantes in Paris. There he obtained his only formal qualifications, diplomas in Chinese and Hindi, and also Certificat de licence in Sanskrit language and literature from the University of Paris, where he studied under Louis Renou. In 1952 he became a member of the École Française d'Extrême Orient, at first as Conservateur at the Musée Albert Sarreau in Phnom Penh, Cambodia. French archaeologists were well established there, and as a normal part of their work had collected a great many inscriptions from the Hindu temples, written in mixed Sanskrit and Khmer. After about a.d. 600 the dates in these texts were based on the Indian calendar. These were to become a major focus of Billard's interest. In 1956, on his return to Paris, he published in *Artibus Asiae* (xix, 3/4, 186-96) the article "Perspectives nouvelles sur l'astronomie indienne", announcing his principal discovery, that the parameters of the mean longitudes in Aryabhata's canon were based on observations carried out in his own lifetime, that is, around a.d. 500. This discovery was the cornerstone of all the later researches which became the subject of his book, *L'Astronomie indienne: Investigation des textes Sanskrits et des données numériques*, which appeared in 1971 as vol. lxxxiii of Publications de l'École Française d'Extrême Orient. The book won him the Delalande-Guérineau prize of the Académie des Inscriptions et Belles-Lettres, and in 1976 he was elected to the International Academy of the History of Science. He died on 30 December

2000.

HARRY WOOLF (1923-2003)

Harry Woolf, the Director of the Institute for Advanced Study from 1976-87 and subsequently Professor-at-Large at the Institute, died at his home in Princeton on January 6, 2003. Harry Woolf was born in New York City on August 12, 1923. After serving in the Army during World War II, he earned his bachelor's and master's degrees from the University of Chicago in mathematics, physics and history in 1948 and 1949. In 1955, he received his doctorate in the history of science from Cornell University. From 1953 to 1976, Dr. Woolf taught physics and the history of science at Boston University, Brandeis University and the University of Washington before moving to Johns Hopkins, where he was Willis K. Shepard professor of the history of science from 1961 to 1976. He became provost in 1972. In 1976, he was appointed Director of the Institute for Advanced Study, stepping down in 1987 to become Professor-at-Large, and in 1994, Professor-at-Large Emeritus.

Dr. Woolf was also a visiting professor at universities in India and six West African countries.

He wrote "T*he Transits of Venus: A Study of Eighteenth-Century Science*" (1959) and was the editor of "*Quantification: A History of the Meaning of Measurement in the Natural and Social Sciences*" (1961). From 1958 to 1964, he was editor of *ISIS*: An International Review Devoted to the History of Science and its Cultural Influences.

Registration form

To become a member of CHAMA, please, fill the registration form and send it as an attachement to tihon@ori.ucl.ac.be