

NEWSLETTER

INTERNATIONAL UNION of the HISTORY and PHILOSOPHY of SCIENCE

COMMISSION on HISTORY of SCIENCE and TECHNOLOGY in ISLAMIC CIVILIZATION

No. 3 (1995/96)

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1. New organisations/networks/groupes

2. New journals/series/newsletters

Medieval Encounters; *Jewish, Christian and Muslim Culture in Confluence and Dialogue*;
publisher: E. J. Brill, Leiden, New York

3. Conferences/symposia/meetings in 1995

A. H. Sabra gave the plenary lecture "*Essence versus locality*" at the 1995 meeting of the *History of Science Society*, Minneapolis, USA. J. Ragep presented the speaker in a formal introduction.

Medieval Academy Meeting, April 12, 1996, Kansas City, USA: *Medieval Cosmologies: Christian, Jewish, and Islamic*.

organizer: H. Thijssen

speaker: J. Ragep: *Scientific Cosmology in Medieval Islam*

4. Forthcoming events

The Organizing Committee of the XXth International Congress for History of Science, Liège, 1997 informed in the second circular about the following symposia.

1. Symposium: Commission: *Science and technology in the Islamic Civilization*

President: S.M-R. Ansari, Aligarh, India

1.1. SU5: *Crossing boundaries - new approaches to history of pre-modern science and technology*

Organizers: S. Brentjes, Leipzig, Germany

F. Bray, Santa Barbara, USA

N. Sivin, Philadelphia, USA

1.2. SU6: *Science and technology in ancient and medieval Iran*

Organisers: M. Bagheri, Teheran, Iran

J.P. Hogendijk, Utrecht, The Netherlands

1.3. SU7: *Science, technology, and industry in the Ottoman world*

Organisers: E. Ihsanoğlu, Istanbul, Turkey

A. Djebbar, Paris, France

2. Symposium: Commission: *History of Astronomy*

SU14: *Early Renaissance astronomy (ca. 1350-1500)*

Organizer: A. Tihon, Louvain, Belgium

R. Mercier, Great Britain

J. Chabas, France

3. Symposium: *Transfers of Science and Technology*

SM19: *Oriens-Occidents*

Organizers: A. Allard, Louvain, Belgium

R. Rashed, Paris, France

IAU General Assembly
 Kyoto, August 18-30, 1997
 Joint Discussion No. 17: *History of Oriental Astronomy*
 Organizers: S.M.R. Ansari

12th Symposium of the International Committee for pre-Ottoman and Ottoman Research
 (CIEPO)
 September 9-13, 1996, Prague

International Congress on the Introduction of Modern Science and Technology to Turkey
 and Japan
 October 7-11, 1996, Istanbul
 Organizers: IRCICA, Istanbul, Turkey
 The International Research Centre for Japanese Studies, Japan
 The Turkish Society for History of Science, Turkey

5. Publications

Ansari, S.M.R. 1994: Scientific Contacts between Uzbekistan and India.
Dialogue VIII.3 (Editor: Najma Heptulla, New Delhi)

Ansari, S.M.R. Modern Scientific Methods in the Works of Ibn al-Haytham. In:
Fakhruddin Ali Ahmad Memorial Volume, ed. Nazir Ahmad and Asloob Ahmed Ansari,
 Ghalib Institute, New Delhi, 248-271

Ansari, S.M.R. 1994: *Indo-Iranian Exchange in the Exact Sciences*. invited talk at the Iran
 Cultural House, New Delhi, March 16, 1994, to be published in the Extension Lecture
 Series of I. R. H.

Ansari, S.M.R., A. Hussain 1994: Khazīnat al-Aḍād by Atā-ullāh Khānqāhī and Its Main
 Source: Al-Āmilī's Hisāb. *Studies in History of Medicine and Science XIII*, 225-240

Ansari, S.M.R. 1995: Transmission of Arabic-Islamic Astronomy in Medieval India.
Archives Internationales d'Histoire des Sciences

Blay, M.; G. Troupeau 1995: Sur quelques publications récentes consacrées à l'histoire de
 l'optique antique et arabe. *Arabic sciences and philosophy 5.1*, pp. 121-136

Burnett, Ch. 1994: *Magister Iohannes Hispanus: towards the identity of a Toledan
 translator*. in: **Comprendre et maîtriser la nature au moyen âge, mélanges d'histoire des
 sciences offerts à Guy Beaujouan**. Geneva, pp. 425-36

Burnett, Ch., M. Yano, K. Yamamoto 1994: *Abū Ma'shar, The Abbreviation of the
 Introduction to Astrology*, together with the Medieval Latin translation of Adelard of Bath.
 Leiden

Butterworth, Ch. E. 1995: The Source that Nourishes, Averroes's Decisive Determination.
Arabic sciences and philosophy 5.1, pp. 93-120

Chemla, K. 1994: Similarities between Chinese and Arabic Mathematical Writings: (I) Root extraction. *Arabic Sciences and Philosophy* 4.2

Constantine the African and ‘Alī ibn al-‘Abbās al-Mağūsī: *The Pantegni and Related Texts.* (eds.) Burnett, Ch. and D. Jacquart, Leiden, 1994; ISBN 90 04 10014 8, c. NLG 150.-/US \$85.75

De Young, G. 1994: Ibn al-Sarī on *ex aequali* Ratios: His critique of Ibn al-Haytham and his attempt to improve the parallelism between Books V and VII of Euclid’s **Elements**. *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 9, 99-152

Elamrani-Jamal, A. 1995: Ibn Rušd et les *Premiers Analytiques* d’Aristote: Aperçu sur un problème de syllogistique modale. *Arabic sciences and philosophy* 5.1, pp. 51-74

Endress, G. 1995: Averroes’ *De Caelo*, Ibn Rushd’s Cosmology in his Commentary on Aristotle’s *On the Heavens*. *Arabic sciences and philosophy* 5.1, pp. 9-50

Forcada : 1994: **Ibn Asim (d. 403/1013). Kitāb al-anwā- wa’l-amina al-qawl fī l-shuhūr.** (Tratado sobre los anwā- y los tiempos , capítulo sobre los meses). Madrid

Hogendijk, J. P. 1992-4: Four constructions of two mean proportionals between two lines in the **Book of Perfection (Istikmal)** of al-Mu-taman. *Journal for the History of Arabic Science* 10, 13-29

Hogendijk, J. P. 1994: An Arabic text on the comparison of the five regular polyhedra: **Book XV** of the **Revision of the Elements** by Muhy’ al-Dīn al-Maghribī. *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 8, 133-233

Hogendijk, J. P. 1994: Pure mathematics in Islamic civilization. In: **Companion Encyclopaedia of the History and Philosophy of the Mathematical Sciences**. Grattan-Guinness, I. (ed.), London, New York, pp. 70-79

Hogendijk, J. P. 1994: The qibla table in the Ashrafī Zij. In: **Ad Radices. Festband zum fünfzigjährigen Bestehen des Instituts für Geschichte der Naturwissenschaften der Johann Wolfgang Goethe-Universität, Frankfurt am Main.** von Godtstedter, A. (ed.), Stuttgart, pp. 81-94

Hogendijk, J. P. 1995: Al-Mu-taman ibn Hūd, 11th-century king of Saragossa and brilliant mathematician. (text of the plenary lecture on the XIXth International Congress for History of Science, Zaragoza 1992) *Historia Mathematica* 22, 1-18

Hogendijk, J. P. 1995: Mathematics in medieval Islamic Spain. In: **Proceedings of the International Congress of Mathematicians, August 3-11, 1994.** Zürich, Basel, vol. 2, pp. 1568-1580

Ivry, A. L. 1995: Averroes’ Middle and Long Commentaries on the *De anima*. *Arabic sciences and philosophy* 5.1, pp. 75-92

Khajiev, I. 1994: Mathematical Manuscripts in the Oriental Collection of the Central Library of a. Nawai Samarqand State University. *Studies in History of Medicine and Science XIII.1, new series*, 87-96

Kennedy, E. S. 1994: Ibn Muādh on the Astrological Houses. *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 9, 153-160

Kunitzsch, P. 1994: The Second Arabic Manuscript of Ptolemy's Planisphaerium. *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 9, 83-91

Kunitzsch, P. 1994: The Arabic Nomenclature on Coronelli's 110 cm Celestial Globes. *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 9, 91-98

Kunitzsch, P. 1994: Abd al-Malik ibn Habīb's **Book on the Stars**. *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 9, 161-194

Kunitzsch, P., R. Lorch 1994: Abū Nasr and Habash on **matāli al-samt**. *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 9, 43-82

Lorch, R., G. Brey, S. Kirschner, C. Schöner 1994: Ibn as-Saffaārs **Traktat über das Astrolab** in der Übersetzung von Plato von Tivoli. In: **Cosmographica et Geographica**. Festschrift für Heribert M. Nobis zum 70. Geburtstag. (eds.) Brey, G., B. Fritscher, Institut für Geschichte der Naturwissenschaften, 1. Hb; *Algorismus*, Studien zur Geschichte der Mathematik und der Naturwissenschaften, herausgegeben von Menso Folkerts, Heft 13, pp. 125-180

Lorch, R. 1995: **Arabic Mathematical Sciences**. Variorum CS 517

Mallet, D. 1994: Le *kitāb al-Tahlīl* d'Alfarabi. *Arabic Sciences and Philosophy* 4.2

Morelon, R. 1994: Tābit b. Qurra and Arab Astronomy in the 9th Century. *Arabic Sciences and Philosophy* 4.1

Neubauer, E. 1994: Die acht "Wege" der arabischen Musiklehre und der Oktoechos. *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 9, 373-414

Rashed, R. 1994: Modernité et science arabe. *Le cheval de troie* 11, 35-44

Rashed, R. 1994: Indian Mathematics in Arabic. In: Sasaki, Ch., J. Dauben (eds): **The Intersection of History and Mathematics**. Zürich, Basel, pp. 1143-149

Rashed, R. 1994: Analysis and Synthesis according to Ibn al-Haytham. In: Gould, C. C., R. S. Cohen (eds.): **Artifacts, representations and Social Practice**. Dordrecht, Boston, pp. 121-140

Rashed, R. 1994: Riyādiyyāt, riyāda, les mathématiques arabes. In: **Encyclopédie de l'Islam**. pp. 567-580

- Rashed, R. 1995: Recherche scientifique et modernisation en Égypte. L'exemple de Alī Mustafa Musharafa (1898-1950). Études d'un type idéal. In: **Entre réforme sociale et mouvement national. Identité et modernisation en Égypte (1882-1962)**. Roussillon, A. (ed.), CEDEJ, Cairo, pp. 219-232
- Rashed, R. 1995: Conic Sections and Burning Mirrors: An Example of the Application of Ancient and Classical Mathematics. In: Gavroglu, K. et al. (eds.): **Physics, Philosophy and the Scientific Community**. Dordrecht, Boston, pp. 357-376
- Rashed, R. 1995: **Les mathématiques infinitésimales du IXe au XIe siècle**. vol. I: **Commentateurs et Fondateurs: Banū Mūsā, Thābit ibn Qurra, Ibn Sinān, al-Khāzin, al-Qūhī, Ibn al-Samh, Ibn Hūd**. London
- Rashed, R. 1996: **Encyclopedia of the History of Arabic Science**. London, 3 vols
- Rashed, R. 1996: Les commencements des mathématiques archimédiennes en arabe: Banū Mūsā. In: **Actes du Colloque Perspectives médiévales arabes et latines sur la tradition scientifique et philosophique grecque**. Paris, Louvain, pp. 1-19
- Sabra, A. I. 1994: Science and Philosophy in Medieval Islamic Theology. The Evidence of the Fourteenth Century. *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 9, 1-42
- Sabra, A.I. 1994: **Optics, Astronomy, and Logic**. Variorum
- Saliba, G. 1994: **A History of Arabic Astronomy: Planetary Theories during the Golden Age of Islam**. New York, London
- Samsó, J. 1994: **Islamic Astronomy and Medieval Spain**. Variorum CS 248
- Sarma, S. R. 1994: From al-Kura to Bhagola: On the Dissemination of the Celestial Globe in India. *Studies in History of Medicine and Science XIII.1, new series*, 69-86
- Sarma, S. R. 1994: The Lahore Family of Astrolabists and their Ouvrage. *Studies in History of Medicine and Science XIII*, 205-224
- Sezgin, U. 1994: Pharaonische Wunderwerke bei Wasīf as-Sābi- und al-Mas-ūdī. ... *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 9, 229-292
- Shehadeh, K., D. R. Hill, R. Lorch 1994: Construction of a Fluting Machine by Apollonius the Carpenter. *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 9, 326-356
- Schöne, G. 1994: Zum Versuch der Rekonstruktion einer frühen arabischen Laute. *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 9, 357-372
- Soussi, M. 1994: The Mathematical Work of Maghrebian School and its influence on the Occident. *Studies in History of Medicine and Science XIII.1, new series*, 57-68

Troupeau, G. 1994: Du syriaque au latin par l'intermédiaire de l'arabe: le *Kunnāṣ* de Yūhannā ibn Sarābiyūn. *Arabic Sciences and Philosophy* 4.2

Vahabzadeh, B. 1994: Two Commentaries on Euclid's Definition of Proportional Magnitudes. *Arabic Sciences and Philosophy* 4.1

Varisco, D. M. 1994: **Medieval Agriculture and Islamic Science. *The Almanac of a Yemeni Sultan***. University of Washington Press; ISBN # 0-295-97378-1, \$40.00

Varisco, D. M. 1994: The Prophet's Medicine: Part One: The Medieval Islamic View of Man. *The World & I* 9.12, 252-261

Varisco, D. M. 1994: An Anonymous 14th Century Almanac from Rasulid Yemen. *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 9, 195-228

Varisco, D. M. 1995: The Prophet's Medicine: Part Two: Maintaining Good Health. *The World & I* 10.1, 262-271

Zarūqī, M. 1996: Abū l-Qāsim al-Qurashī (d. 580/1184) - Ālim fī l-riyādiyāt wa'l-farā'id. *Cahier du Seminaire Ibn al-Haytham sur l'histoire des mathématiques arabes* 6, 6-22

6. Work in progress

Burnett, Ch.: Editions and English Translations of the Latin translations from the Arabic of Adelard of Bath

Bos, G. and Ch. Burnett: Editions and translations of the Hebrew and Latin version of al-Kindī's letters on astrometeorology (lost in Arabic)

Burnett, Ch., K. Yamamoto, and M. Yano (Kyoto Sangyo University): Edition and Translation of a corpus of texts on Arabic astrology:

1. al-Qabīṣī: **K. al-mudkhal ilā 'ilm al-nujūm** (Arabic, English, Latin);
2. al-Bīrūnī: **K. al-tafhīm** (Arabic, English);
3. Abū Ma'shar: **K. al-ilal wa'l-duwal** (Arabic, English);
De magnis coniunctibus (Latin);
4. al-Kindī: **K. al-'arba'ūna bāban** (Arabic, English, Latin);
Astronomical and astrological letters (Arabic, English);
5. 'Umar b. al-Farrukhān: **K. al-masā'il** (Arabic, English, Latin);
6. Ptolemy: **Tetrabiblos** (Arabic);
7. Kushyār b. Labbān: **K. al-mudkhal fiṣinā'at al-nujūm** (Arabic, Chinese, English)

Kunitzsch, P.: Edition of Hermes' *De stellis beibeniis*, Arabic/Latin, as part of the project: **Hermes Latinus** (chairman: P. Lucentini, Florence)

Lorch, R.: Edition of Thābit b. Qurra's *Fī shakl al-qattā'*, Arabic, sponsored by the German Research Foundation (DFG)

7. Institutions

For many years, a group within the field of Arab Studies at the University of Barcelona has been researching the Astronomy of al-Andalus (theoretical and instrumental) and its repercussions on the Medieval Christian and Latin West as well as on the Maghreb and Islamic East.

The group comprises Arabists, historians, and researchers from other fields, who continue to work in the tradition established in the 30s by Professor Millás Vallicrosa and maintained by Professors Vernet and Samsó.

In the last fifteen years three research programmes have been carried out with the support of Spanish public institutions: "XIIIth Spanish Astronomy and related sciences", "The Astronomy of Alfonso X, its Arab sources and its influence on Europe", and "Theoretical astronomy and astronomical tables in al-Andalus. Xth and XIth centuries". These research findings have been published in journals in Spain and abroad in both monographs and collections. Several members of the group have also taken an active part in the organisation of recent exhibitions of Andalusian science: "Astronomical Instruments in Medieval Spain" (Santa Cruz de la Palma, 1985) and "The Andalusian Scientific Legacy" (Madrid, 1992, and Ronda, 1995).

The number of researchers grows periodically as doctorate students are incorporated to the Andalusian Astronomy programme run by the Department of Arab Studies. The department maintains frequent contacts with other research centres and eminent academics. Many of whom participated in the Symposium entitled "The circulation of scientific ideas, in the field of the exact sciences, in the Medieval Islamic World between the East and the West", which was held within the XIXth International Congress of History of Science (ICHS) in Zaragoza, Spain, in 1993 in honour of Professor Vernet. The proceedings will shortly be published containing the papers presented at the Symposium together with contributions from those who while unable to attend wished to participate in the tribute.

In 1992, the History of Science Society awarded the Sarton medal to Professor Vernet. At the XXth ICHS to be held in Liège, in 1997, the Barcelona group will receive the 1995 Koyré medal which is awarded every two years by the International Academy of the History of science.

In addition to Vernet and Samsó the group also includes E. Millás, M. Viladrich, R. Puig, J. Carandell, H. Mielgo, M. Comes, E. Calvo, M. Forcada, M. Castells, J. Casulleres, A. Mestres, and M. Rius.

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8. Research Reports

9. Teaching

Germany:

Brentjes, S.: History of Science in Islam
 lecture course and seminar
 Georg-August-University, Göttingen

Kunitzsch, P.: retirement 1996
 Maximillians-University, Munich

France:

Rashed, R.: History of Archimedean Mathematics
 Université VII

Japan:

Rashed, R.: History of interaction between mathematics and science
 lecture course
 Vision, light, and knowledge: the impact of optics on the theory of knowledge
 lecture course
 University of Tokyo

UK:

Burnett, Ch.: Islamic Authorities and Arabic Elements in the Renaissance.
 seminar for MA students in "Combined Historical Studies":
The Renaissance
 Warburg Institute, University of London

10. Thesis

Bellosta, H.: Doctoral thesis on *L'analyse et la synthèse, établissement du texte, traduction et commentaire du traité du mathématicien arabe Ibrāhīm ibn Sinān*.
 Université Paris VII, September 1994

G. de Callatay: Ph. D. on *The World Year, from Plato until the Renaissance*. (This includes two chapters on the discussion of the World Year in Arabic sources); supervisor: Ch. Burnett

Freudenthal, G.: Habilitation on *Recherches sur la théorie de la matière dans la tradition aristotélicienne et sur les sciences dans la culture hébraïque médiévale*. Université Paris VII, February 1996

O. Gutman (registered in Oxford): Ph. D. on *Cosmology in the 12th and 13th centuries*. (including an edition and translation of the Pseudo-Avicennan *Liber caeli et mundi*, which is, in reality, Ḥunayn b. Isḥāq's translation of 16 questions on Aristotle's *De caelo et mundo* by Themistios); supervisor: Ch. Burnett

D. N. Hasse: Ph. D. on *The Influence of Avicenna's De Anima in the Latin West until 1300*. (This includes discussion of the differences between Ibn Sīnā's Arabic text and the Latin translation of Avendauth and Gundissalinus); supervisor: Ch. Burnett

Mégri, Kh.: Doctoral thesis on *L'arc-en-ciel et le halo selon Kamāl al-Dīn al-Fārisī*. Université Paris VII, September 1994

Morelon, R.: Habilitation on *Astronomie arabe entre le IX^e et le XI^e siècle*. Université Paris VII, October 1995

11. Awards, Elections, etc.

At the XXII General Assembly of the International Astronomical Union held in The Hague, The Netherlands, Aug. 14-27, 1994, S.M.R. Ansari has been elected as the president of the IAU Commission for History of astronomy for 1994-1997. He was Vice-President of the commission for 1991-1993.

The Commission was created in 1948, when Otto Neugebauer served as its first president. This is, since then, the first time that the presidentship has gone to Asia. As a president, Ansari has to organise a scientific meeting/joint discussion at the general Assembly of the IAU, to be held in Kyoto, Japan, August 19-30, 1997. It is also being planned to organise a symposium at the XXIII General Assembly on **History of Astronomy in Asia and Far East**. For mor details, Ansari may be contacted.

G. P. Matvievskaya, E. Ihsanoğlu, and S. Brentjes have been elected as corresponding members of the International Academy for History of Science, Paris.