

Recent publications relating to the history of astronomy

Books and Pamphlets

- Aratus *Solensis*. *Phaenomena*. Edited with introduction, translation and commentary by Douglas Kidd. Cambridge, New York, Cambridge University Press, 1997. xxiii, 590 p. illus. (Cambridge classical texts and commentaries, 34)
Greek and English on facing pages.
- Barbree, Jay, Martin Caidin, and Susan G. Wright. *Destination Mars: in art, myth, and science*. New York, Penguin Studio, 1997. 228 p. illus. (part col.), facsims. (part col.), ports. (part col.)
Mars through human history from antiquity to the present, as well as plans and ideas for the future.
- Beckman, Olof. Ångström, father and son. Uppsala, 1997. 44 p. illus. (part col.), ports. (part col.) (Acta Universitatis Upsaliensis. C, Organisation och historia, 60)
About Anders Jonas and Knut Ångström.
- Brack-Bernsen, Lis. *Zur Entstehung der babylonischen Mondtheorie; Beobachtung und theoretische Berechnung von Mondphasen*. Stuttgart, F. Steiner, 1997. 142 p. illus. (Boethius, Bd. 40)
- Casanova, Giacomo. *Prosopopea Ecaterina II und Istanza; zwei unbekannte Texte von Giacomo Casanova de Seingalt (1725–1798)*. Kritische Ausgabe der italienischen Handschriften aus dem Casanova-Nachlass in Mnichovo Hradisté (Tschechische Republik). Einführung, Anmerkungen und deutsche Übersetzung von Enrico Straub. Frankfurt am Main, New York, P. Lang, 1993. 175 p. facsims. (Documents casanoviens, cahier no. 4)
The second letter is a discourse on the Gregorian reform of the calendar, with a recommendation that the empress consider adopting it for Russia.
The editor states that this letter is the earliest surviving record of Casanova's lifelong interest in astronomical and mathematical problems, particularly those relating to the calendar.
- Chevalier, Jacques M. *A postmodern Revelation: signs of astrology and the Apocalypse*. Toronto, Buffalo, N.Y., University of Toronto Press, 1997. 415 p. facsims.
"This book explores the confrontation between and downfall of two modes of storytelling in Western history: astrology and eschatology — hence, divination and prophecy, or the cult of stars and the visions of Revelation."
- Cook, Sir Alan H. *Edmond Halley: charting the heavens and the seas*. Oxford, Clarendon Press, 1998. xvi, 540 p., [16] p. of plates. illus., facsims., maps, ports.
- Crosby, Alfred W. *The measure of reality: quantification and Western society, 1250–1600*. Cambridge, New York, Cambridge University Press, 1997. 245 p. illus., facsims., port.
See particularly chapters 4–6, "Time," "Space," and "Mathematics."
- Dadić, Žarko. *Herman Dalmatin; Hermann of Dalmatia; Hermannus Dalmata*. Prijevod na engleski/English translation, Janko Paravić. Zagreb, Školska knjiga, 1996. 211 p. illus. (part col.), facsims. (part col.), maps (part col.), ports. (part col.)
Croatian and English on facing pages.
"Djela prijevodi Hermana Dalmatina"; "Works and Translations of Hermann of Dalmatia": p. 200–205.
- Esposito, Mario. *Irish books and learning in mediaeval Europe*. Edited by Michael Lapidge. Aldershot, Hants, Variorum, 1990. [312], 9 p. facsim. (Collected studies series, CS313)
Partial contents: 7. An unpublished astronomical treatise by the Irish monk Dicuil (1907). — 8. A ninth-century astronomical treatise (1920).
Additions and corrections to essay no. 7 appear in an addendum to essay no. 12, "Note on a Ninth Century Commentary on Martianus Capella" (1910).
- Friedman, Anna F. *Awestruck by the majesty of the heavens. Artistic perspectives from the history of astronomy collection*, Adler Planetarium & Astronomy Museum, Chicago. Chicago, Adler Planetarium & Astronomy Museum, 1997. 39 p. facsims. (part col.), ports.
Catalog of an exhibition held Jan. 18–Mar. 23, 1997, at the Chicago Cultural Center.
- Hashimoto, Keizo. *Hsü Kuang-ch'i and astronomical reform; the process of the Chinese acceptance of western astronomy, 1629–1635*. Osaka, Kansai University Press, 1988. 240 p., 1 fold. leaf of plates. illus., facsims.
Contents: ch. 1. Hsü Kuang-ch'i: the organizer of the astronomical reform. — ch. 2. The meaning of the Tychonic world system. — ch. 3. The introduction of the Galilean invention and Keplerian optics. — ch. 4. Astronomical instruments and observations.
- Hawley, John F., and Katherine A. Holcomb. *Foundations of modern cosmology*. New York, Oxford University Press, 1998. 506 p. illus., ports.
Contents: pt. 1. History. — pt. 2. Background. — pt. 3. Relativity. — pt. 4. The big bang. — pt. 5. The continuing quest.

- Hentschel, Klaus. *The Einstein Tower: an intertexture of dynamic construction, relativity theory, and astronomy*. Translated by Ann M. Hentschel. Stanford, Calif., Stanford University Press, 1997. xiv, 226 p. illus., facsim., plans, ports. (Writing science)
 Translation of his *Der Einstein-Turm* (Heidelberg, Spektrum, Akademischer Verlag, 1992), cited in *H.A.D. News* no. 28.
- Kepler, Johann. *Passage de Mercure sur le soleil; suivi de L'origine des races d'après Moïse*. Avec la préf. de Frisch. Traduit pour la première fois du latin en français, avec un avertissement et des notes, par Jean Peyroux. Bordeaux, J. Peyroux; Paris, Diffusion A. Blanchard, 1995. 108 p. illus.
 Includes also two letters from Pierre Gassendi concerning a transit of Mercury seen, and a transit of Venus not seen, by the inhabitants of Paris in 1631.
- Kozenko, A. V. *Artur Stenli Éddington, 1882–1944*. Otv. redaktor, A. A. Gurshten. Moskva, "Nauka," 1997. 143 p. illus., ports. (Seriiia "Nauchno-biograficheskaiia literatura")
 A chronology of Eddington's life and work appears on p. 116–117, and a chronological listing of his publications, on p. 118–123.
- McCleary, Timothy P. *The stars we know; Crow Indian astronomy and lifeways*. Prospect Heights, Ill., Waveland Press, 1997. xxii, 127 p. illus., charts, map, ports.
 Contents: Stars and constellations of the Crow. — Farrer, C. R. Foreword. — Old Horn, D. D. Prologue. — Acknowledgments. — Crow language alphabet and pronunciation guide. — ch. 1. Our side. — ch. 2. The Crow people and the stars. — ch. 3. The bright star. — ch. 4. Planets: the unpredictable stars. — ch. 5. The twins and the Hand Star. — ch. 6. The seven stars. — ch. 7. The sweatlodge and the stars. — ch. 8. Moving lights of the night. — ch. 9. The sun, the moon, and the Milky Way. — ch. 10. In the company of stars. — Appendix. Crow star names of unidentified constellations. — Further reading. — Farrer, C. R. Study guide.
 Chapter 3, "The Bright Star," was first published in the *North Dakota Quarterly*, v. 63, fall 1996, p. 104–112.
- McCluskey, Stephen C. *Astronomies and cultures in early medieval Europe*. Cambridge, New York, Cambridge University Press, 1998. xiv, 235 p. illus., facsim., plan.
- Mayaud, Pierre N. *La condamnation des livres coperniciens et sa revocation à la lumière de documents inédits des Congrégations de l'Index et de l'Inquisition*. Roma, Editrice Pontificia Università Gregoriana, 1997. 352 p. (Miscellanea historiae pontificiae, v. 64)
 Contents: ptie. 1. La mise à l'Index. — ptie. 2. La période intermediaire. — ptie. 3. Le retrait de l'Index. — ptie. 4. Après le retrait.
- Mett, Rudolf. *Regiomontanus, Wegbereiter des neuen Weltbildes*. Stuttgart, G. B. Teubner Verlagsgesellschaft, 1996. 204 p. illus., facsim., ports. (Einblicke in die Wissenschaft. Wissenschaftsgeschichte)
 Contents: Herkunft und Familie. — Die Leipziger Zeit. — An der Alma Mater Rudolfina in Wien. — Italienische Renaissance. — Das ungarische Spiel. — In der Reichsstadt Nürnberg. — Das Ende in Rom. — Regiomontanus und Kolumbus. — Seine Wirkung auf die Nachwelt.
- Parisot, Jean P., and Françoise Suagher. *Calendriers et chronologie*. Paris, Masson, 1996. 209 p. illus. (Collection De caelo)
 Contents: 1. ptie. L'astronomie des calendriers. — 2. ptie. Calendriers d'ici. — 3. ptie. Calendriers d'ailleurs.
- Pierantoni, Ruggero. *Monologo sulle stelle; forme della luce dalle origini alle fini dei mondi antichi*. Torino, Bollati Boringhieri, 1994. 423 p., [16] p. of plates. illus. (part col.), plans. (Saggi)
- Problemy prostranstva, vremeni, tiagoteniia. *Sbornik nauchnykh state. Po materialam III Mezhdunarodno konferentsii, 22–27 maia 1994 g., Rossiia, Sankt-Peterburg*. 3. Klassicheskaiia mekhanika i astronomiia. Sankt-Peterburg, Politekhnik, 1995. p. 207–219.
 Partial contents: Nevskaia, N. I. "Repressirovanoe" izdanie "Nachal" N'iutona. — Nevskaia, N. I. I. N'iuton i Peterburgskaia Akademiia Nauk (XVIII v.). — Tolchel'nikova-Murri, S. A. Zakon vsemirnogo tiagoteniia i absolutnaia sistema koordinat. — Nefed'ev, I. U. A., L. I. Rakhimov, N. G. Rizvanov, and R. R. Shamukhametov. Efemeridy luny i shkala ravnomernogo vremeni v astronomii. — Zlotnikov, L. M. Drevnie printsipy kvantovaniia mer prostranstva, vremeni i massy. — Tolchel'nikova-Murri, S. A., and M. V. Zinchenko. K probleme ucheta aberratsii sveta.
- Puig-Samper, Miguel A., and Francisco Pelayo López. *El viaje del astrónomo y naturalista Louis Feuillée a las Islas Canarias (1724)*. Seguido de la transcripción y traducción del manuscrito "Historia antigua y moderna de las Islas Canarias", redactado por Louis Feuillée. Prólogo: Arnoldo Santos Guerra. Avec le concours de la Bibliothèque Centrale du Muséum National d'Histoire Naturelle Paris. La Laguna, Tenerife, Centro de la Cultura Popular Canaria, 1997. 207 p. facsim., maps, port. (Taller de historia, 21)

Contents: Prólogo de Arnoldo Santos Guerra. — cap. 1. Apuntes biográficos y viajes científicos de Louis Feuillée. — cap. 2. El viaje a Canarias en 1724 de Louis Feuillée. — cap. 3. La repercusión de las observaciones astronómicas realizadas en Canarias. — Apéndice. Feuillée, L. Historia antigua y moderna de las Islas Canarias. Feuillée, L. Histoire ancienne et moderne des Isles Canaries.

Includes discussion of the achievement of a more precise measurement of the distance between the meridian of Hierro (Ferro) and that of Paris.

Reeves, Eileen A. *Painting the heavens: art and science in the age of Galileo*. Princeton, N.J., Princeton University Press, 1997. 310 p., [8] p. of plates. illus. (part col.), col. ports.

Sheynin, Oscar. *The history of the theory of errors*. Egelsbach, Hänsel-Hohenhausen, 1996. 180 p. illus. (Deutsche Hochschulschriften, 1118)

Spandagos, Vangelēs, Roula Spandagou, and Despoina Traulou. *Hoi astronomoi tēs archaias Helladas; viografika stoicheia kai ergasies tōn astronomōn tēs archaias Helladas apo to 1500 p.Ch. hēos to 500 m.Ch.* Athēna, "Aithra" [1996?] 343 p. illus., facsim., maps, ports.

Arrangement of the biographical sketches is chronological, with an alphabetical name index.

Stern, Alan, and Jacqueline Mitton. *Pluto and Charon: ice worlds on the ragged edge of the solar system*. New York, J. Wiley, 1998. 216 p. illus., ports.

"A Chronology of Major Events in the Exploration of Pluto & Charon": p. 207–208.

Tištrya. [A cura di Antonio Panaino] 1. *The Avestan hymn to Sirius*. Roma, Istituto italiano per il Medio ed Estremo Oriente, 1990. xix, 157 p. (Serie Orientale Roma, 68)

Turner, Howard R. *Science in medieval Islam, an illustrated introduction*. Austin, University of Texas Press, 1997. xviii, 262 p. illus., facsim., maps, plans.

Partial contents: 4. Cosmology: the universes of Islam. — 5. Mathematics: native tongue of science. — 6. Astronomy. — 7. Astrology: scientific non-science.

Varisco, Daniel M. *Medieval folk astronomy and agriculture in Arabia and the Yemen*. Aldershot, Hants, Brookfield, Vt., Ashgate Variorum, 1997. [331], 7 p. illus. (Variorum collected studies series, CS585)

Partial contents: pt. 1. Arab folk astronomy. 1. The origin of the *Anw_* ' in Arab tradition (1991). 2. The *Anw_* ' stars according to Ab_Is_q al-Zajj_j (1989). 3. The rain periods in pre-Islamic Arabia. — pt. 2. Traditional Yemeni agriculture. 9. The agricultural marker stars in Yemeni folklore (1993). 11. Agricultural time reckoning in the *Urj_za* of asan al-'Aff_ri: a study on the Yemeni agricultural almanac (1989). — pt. 3. Medieval Yemeni agriculture. 14.

An anonymous 14th century almanac from Rasulid Yemen (1994). [English translation followed by Arabic text] 15. A Rasulid agricultural almanac for 808/1405–6 (1993).

Walz, Eberhard. *Johannes Kepler Leomontanus, "Gehorsamer Underthan vnd Burgerssohn von Löwenberg."* Leonberg, Stadtarchiv Leonberg, 1994. 139 p. illus., facsim., maps, ports. (Beiträge zur Stadtgeschichte, 3)

Weiss, Richard J. *A brief history of light and those that lit the way*. Singapore, River Edge, N.J., World Scientific, 1996. 176 p. (Series in popular science, v. 1)

Zabierowski, Mirosław. *Wszecławiat i kopernikanizm*. Wrocław, Oficyna Wydawnicza Politechniki Wrocławskiej, 1997. 130 p.

Articles, Including Essays in Books and Papers in Proceedings

Abhyankar, Krishna D. *Some reminiscences of an astrophysicist*. In *Indian Physical Society diamond jubilee (1934–94): 60 years*. Souvenir. Calcutta, Indian Physical Society [1994?] p. 33–34 (2d group)

The Airy Altazimuth. *Astronomy & geophysics*, v. 38, Aug./Sept. 1997: 7. illus.

"This year marks the 150th anniversary of a major instrument at the Greenwich Observatory ..."

Arnau, Arturo, Iñaki Tuñón, and Estanislao Silla. *The discovery of the chemistry among the stars*. *Journal of chemical education*, v. 72, Sept. 1995: 776–781. illus.

Beckwith, Roger T. *The Essene calendar and the moon: a reconsideration*. *Revue de Qumrân*, t. 15, mars 1992: 457–466.

Beckwith, Roger T. *The Temple Scroll and its calendar: their character and purpose*. *Revue de Qumrân*, t. 18, avril 1997: 3–19.

Begley, Sharon, and Theodore Gideonse. *When the comet flew through ancient evenings*. *Newsweek*, v. 129, Mar. 24, 1997: 42–47. col. illus.

"As soon as astronomers calculated that Hale-Bopp last visited 3,210 years ago, archeologists scurried to scrutinize steles, hieroglyphics and Chinese oracle bones for some sign that ancient civilizations had noted the apparition. The result: not a shred of evidence that anyone observed the last coming. But researchers blame that on the skimpiness of the historical record rather than the obliviousness of our ancestors. Now scientists are taking a more roundabout route to determining the comet's role in history. Heirs to a century's worth of stunning archeological finds that shed new light on the dawn of civilization, they are re-examining long-forgotten finds in an attempt to wring new answers from the old relics. Namely, how did ancient peoples react to the comet? And — going out on a limb — how did it change the course of history?"

Bonk, Thomas. Newtonian gravity, quantum discontinuity and the determination of theory by evidence. *Synthese*, v. 112, July 1997: 53–73.

"It is suggested that demonstrative induction is a computational step in fitting a theoretical model and a set of phenomena, with little direct confirmational impact. The thesis of undetermination, whatever one may think of it, is not threatened by demonstrative induction."

Brague, Rémi. Cosmological mysticism: the imitation of the heavenly bodies in Ibn Tufayl's *Hayy ibn Yaqzan*. *Graduate faculty philosophy journal*, v. 19, no. 2/v. 20, no. 1, 1997: 91–102.

Brand, Peter W. J. L. The Revd Dr David Emerson, 1943–1996. *Astronomy & geophysics*, v. 38, Aug./Sept. 1997: 38. col. port.

Bronsh̄t̄en, Vitaliĭ A. Russian astronomers in Turkmenia. *Science in Russia*, Jan./Feb. 1996: 46–49. illus., ports.

Brück, Mary T. An astronomical love affair. In *Stars, shells and bluebells: women scientists and pioneers*. Dublin, WITS, Women in Technology and Science, 1997. p. 76–83. illus., port.

"Lady Margaret Lindsay Huggins (1848–1915): a thirty-year collaboration with her husband William Huggins laid the foundations for the development of astrophysics."

Brück, Mary T. Bringing the heavens down to earth. In *Stars, shells and bluebells: women scientists and pioneers*. Dublin, WITS, Women in Technology and Science, 1997. p. 66–74. ports.

"Agnes Mary Clerke (1842–1907): an expositor whose writings explained and promoted astronomy; her 'History of Astronomy during the Nineteenth Century' is still indispensable."

Includes a box, "Torch-bearing women astronomers" (p. 70–71).

Burton, Michael G. Evolution in the nucleus: a review of David Allen's research into the nature of the Galactic Centre. In *International Astronomical Union. Symposium, 169th, The Hague, 1994. Unsolved problems of the Milky Way. Proceedings of the 169th Symposium of the International Astronomical Union, held in The Hague, the Netherlands, August 23–29, 1994. Edited by Leo Blitz and Peter Teuben. Dordrecht, Boston, Kluwer Academic Publishers, 1996. p. 205–214. illus. (part col.)*

A list of Allen's writings on the galactic center appears on p. 212–213.

The color illustrations are found on p. xx of the volume.

Capaccioli, Massimo. Leonida Rosino (1915–1997). *Giornale di astronomia*, v. 23, sett. 1997: 2. port.

Carvalho, Rómulo de. João Chevalier, astrónomo português do século XVIII. In *his* *Actividades científicas em Portugal no século XVIII. Évora, Universidade de Évora, 1996. p. 267–321.*

The "Apêndice documental" presents correspondence and observations sent by Father Chevalier to J. N. de L'Isle, from the archives of the Observatoire de Paris.

First published in the *Memórias* of the Academia das Ciências de Lisboa, Classe de Ciências, t. 32, 1992/93, p. 297–351.

Chabás, José. Le cahier d'astronomie d'un croisier du XV^e siècle. *Nuncius*, anno 12, fasc. 1, 1997: 3–16.

"Manuscript 354C of the University of Liege is an astronomical notebook, most probably put together between 1423 and 1430. It contains treatises and astronomical tables, lists of numerical data, numerous astrological squares and notes on various astronomical problems.

The author of the notebook is an astronomical practitioner, a 'croisier' at the Convent of Huy (Liege) who, in his notebook, allows his interests, the problems that he considered and the methods used to tackle them to be seen."

Chakraborty, A. K. Bengal school of astronomy. In *Asiatic Society, Calcutta. Journal*, v. 37, no. 2, 1995: 5–17.

Das Gupta, M. K. A radio astronomer by luck. In *Indian Physical Society diamond jubilee (1934–94): 60 years. Souvenir. Calcutta, Indian Physical Society [1994?] p. 18–22 (2d group)*

Débarbat, Suzanne V. Discoveries in the solar system. In *IAU Colloquium, 165th, Poznań, 1996. Dynamics and astrometry of natural and artificial celestial bodies. Proceedings of IAU Colloquium 165, Poznan, Poland, July 1–5, 1996. Edited by I. M. Wyrzyższczak, J. H. Lieske, R. A. Feldman. Dordrecht, Boston, Kluwer Academic Publishers, 1997. p. 133–140.*

"The subject of IAU Colloquium 165 and the year 1996, which is the 150th anniversary of the discovery of the planet Neptune, give the opportunity to recall facts which have led to the discovery of three new major planets in the Solar System."

Dick, Steven J. The biophysical cosmology: the place of bioastronomy in the history of science. *In* International Conference on Bioastronomy, 5th, Capri, 1996. Astronomical and biochemical origins and the search for life in the universe. Proceedings of the 5th International conference on bioastronomy, IAU Colloquium no. 161, Capri, July 1–5, 1996. Edited by Cristiano Batalli Cosmovici, Stuart Bowyer, Dan Werthimer. Bologna, Editrice Compositori, 1997. p. 785–788.

Dinis, Alfredo. Astrologia e profecia no pensamento do P. António Vieira. *Brotéria*, v. 145, out./nov. 1997: 347–360.

Federspiel, Michel. Notes sur le traité aristotélicien *Du ciel*. *Revue des études anciennes*, t. 97, no 3/4, 1995: 505–516.

"The first part is devoted to textual remarks on the text provided by P. Moraux. The second consists in exegetical notes, mainly on scientific passages."

Feuerstein, Georg, Subhash C. Kak, and David Frawley. Vedic myths and their astronomical basis. *In their* In search of the cradle of civilization; new light on ancient India. Wheaton, Ill., Quest Books, 1995. p. 229–248. illus.

Fischer, Daniel. Jürgen H. Rahe †. *Sterne und Weltraum*, 36. Jahrg., Nr. 10, 1997: 825.

French, Bevan M. Memorial: Eugene M. Shoemaker (1928–1997). *Meteoritics & planetary science*, v. 32, Nov. 1997: 985–986. port.

Frontón Simón, Isabel M. El calendario medieval de San Pedro de Treviño (Burgos). *Boletín del Museo e Instituto "Camón Aznar"*, no. 52, 1993: 169–188. illus.

Sculptures depicting signs of the zodiac and agricultural activities associated with various months adorn the archivolt of the church's portal.

See also the study by Margarita Ruiz Maldonado, cited below.

Gingerich, Owen. The world's greatest rare astronomy libraries. *AB bookman's weekly*, v. 100, Oct. 27, 1997: 1022, 1024, 1026, 1028. illus., port.

Golub, Leon, and Jay M. Pasachoff. Brief history of coronal studies. *In their* The solar corona. Cambridge, New York, Cambridge University Press, 1997. p. 22–49. illus., facsim., maps.

Green, Daniel W. E. Robert Burnham, Jr. (1931–1993). *International comet quarterly*, v. 19, Oct. 1997: 221.

Greiner, Jochen. Laudation. *In* IAU Colloquium, 151st, Sonneberg, Thuringia, 1994. Flares and flashes. Proceedings of IAU Colloquium no. 151, held in Sonneberg, Germany, 5–9 December 1994. Berlin, New York, Springer, 1995. (Lecture notes in physics, 454) p. xviii–xxii. ports.

Reviews the careers, devoted to the discovery and study of variable stars, of Wolfgang Wenzel and Gerold Richter, and concludes with comments on the unhappy results of reunification for the Sonneberg Observatory and its staff.

Griffith, R. Drew. Homeric *διπτερος ποταμοιο* and the celestial Nile. *American journal of philology*, v. 118, fall 1997: 353–362.

Questions the usual explanation of the Homeric phrase and argues in support of its derivation from the ancient Egyptian concept of the celestial Nile, which "by day was the course along which the sun god, Ra, traveled in his barque (*m'ndt*), and by night was visible as the Milky Way."

Halbronn, Jacques. Le diptyque astrologique d'Abraham Ibn Ezra et les cycles planétaires du Liber Rationum. *Revue des études juives*, t. 155, janv./juin 1996: 171–184.

Hannah, Robert. Is it a bird? Is it a star? Ovid's Kite — and the first swallow of spring. *Latomus*, t. 56, avril/juin 1997: 327–342. charts.

"The aim of this paper is to examine the reference to the apparently fictitious constellation of the kite in the *Fasti* ... In the process it shall be seen that there are also grounds for suggesting that the proverbial sighting of the first swallow of spring ... may well have been intended at an early period also as a star-sighting."

Heinlein, Dieter. Nachruf: Dr. Eugene Shoemaker. *Sterne und Weltraum*, 36. Jahrg., Nr. 10, 1997: 898. col. port.

Herbig, George H. The contributions of the Böhms to stellar and circumstellar astrophysics. *In* Stellar and circumstellar astrophysics. Proceedings of a conference held at the University of Washington, 9–11 September 1993, in honor of the 70th birthdays of Karl-Heinz Böhm and Erika Böhm-Vitense. Edited by George Wallerstein and Alberto Noriega-Crespo. San Francisco, Astronomical Society of the Pacific, 1994. (Astronomical Society of the Pacific conference series, v. 57) p. 3–11. illus.

A photograph of the Böhms at Lick Observatory in 1955 appears on p. vi of the volume.

- Howse, H. Derek, *and* C. Andrew Murray. Lieutenant Cook and the transit of Venus, 1769. *Astronomy & geophysics*, v. 38, Aug./Sept. 1997: 27–30. illus. (part col.), facsim.
- Huebner, Walter F. Jürgen H. Rahe. *Physics today*, v. 50, Dec. 1997: 92. port.
- Idlis, Grigori M. Russian astrophysicists in Kazakhstan. *Science in Russia*, Nov./Dec. 1995: 81–83. col. illus., port.
- Iliffe, Rob, *and* Frances Willmoth. Astronomy and the domestic sphere: Margaret Flamsteed and Caroline Herschel as assistant-astronomers. *In* *Women, science and medicine, 1500–1700; mothers and sisters of the Royal Society*. Edited by Lynette Hunter & Sarah Hutton. Thrupp, Stroud, Glos, Sutton Pub., 1997. p. 235–265. facsim., ports.
- Innocenti, Cristiana. Il fondamento astrologico della realtà nel *De incantationibus* e nel *De fato* di Pietro Pomponazzi. *Nouvelles de la république des lettres*, anno 17, sett. 1997: 49–77.
- Jones, Bernard J. T. A brief history of cosmology. *In* *Moroccan School of Astrophysics, 1st, Casablanca, 1996*. From quantum fluctuations to cosmological structures. Proceedings of the First Moroccan School of Astrophysics, Casablanca, Morocco, 1–10 December 1996. Edited by David Valls-Gabaud, Martin A. Hendry, Paolo Molaro, and Khalil Chamcham. San Francisco, Astronomical Society of the Pacific, 1997. (Astronomical Society of the Pacific conference series, v. 126) p. 1–30.
- Jozeau, Marie F., *and* Michèle Grégoire. Measuring an arc of meridian. *In* *Vita mathematica; historical research and integration with teaching*. Ronald Calinger, editor. Washington, D.C., Mathematical Association of America, 1996. (MAA notes, no. 40) p. 269–277. illus., facsim., map, ports.
- Khoury, Ibrahim. The stars of Arab navigation in Ibn Mağid works. *In* *Coimbra. Universidade. Revista*. v. 35. Coimbra, 1989. p. 395–405.
- Kienast, Hermann J. Antike Zeitmessung auf der Agora; neue Forschungen am Turm der Winde in Athen. *Antike Welt*, 28. Jahrg., Heft 2, 1997: 113–115. col. illus., facsim., plan.
On the 1st-century B.C. Tower of the Winds in Athens. The structure, which had sundials and a water-clock, is presently undergoing restoration.
- King, David A. La scienza al servizio della religione: il caso dell'Islām. *In* *Atti del Simposio internazionale La civiltà islamica e le scienze*. Firenze — Palazzo Panciatichi, 23 novembre 1991. A cura di Clelia Sarnelli Cerqua, Ornella Marra, Pier Giovanni Pelfer. Napoli, CUEN, 1995. p. 129–150. illus., facsim.
- Kozamthadam, Job. Kepler and the sacredness of natural science. *In* *Philosophy in science*. v. 7. Tucson, Ariz., Pachart Pub. House, 1997. p. 9–36.
- Kragh, Helge. The electrical universe: grand cosmological theory versus mundane experiments. *Perspectives on science*, v. 5, summer 1997: 199–231. illus.
"This article examines in detail a remarkable but short-lived cosmological theory of 1959 [suggested by Raymond Lyttleton and Hermann Bondi] The theory depended crucially on a hypothesis that could be, and was, tested in the laboratory. I use the case to discuss the nature of testing in cosmology and to argue against ideas about astronomy suggested by Ian Hacking."
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"On 25 September 1344, Pope Clement VI wrote to the astronomers John of Murs and Firmin of Beauval, asking them to come to Avignon to reform the calendar ...
"The suggestions of John of Murs and Firmin of Beauval concerning the reform of the solar and lunar calendar were not implemented, probably because Clement was too busy with other matters. In addition, the Black Death may have made plans for the next nine thousand years seem unnecessary. John and Firmin's suggestions for reform, however, are reasonable and presented very clearly. Interestingly, the authors are convinced that more recent astronomers should, in this case, be believed more than the ancients, because later men had at their disposition observations over a longer period of time, and thus were able to see small imprecisions by their accumulation ... This seems to be an early instance of scholars saying that it was possible that they knew better than the ancients. Indeed the authors' calculations for both the solar and lunar calendars are almost exactly those used in the Gregorian reform in 1582, so the reform could have been accomplished just as well astronomically in 1345 ..."
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Toulmonde's report was cited in *H.A.D. News* no. 42.
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"The 'constant' H, whose customary units are (km/sec)/Megaparsecs, is a measure of the distance scale, expansion rate, and (indirectly) age of the universe. The first determinations of its value, by Hubble himself, between 1929 and 1936, were in the range 500–550 km/sec/Mpc, implying a universe only about 2 Gyr old (less than the age of the earth as understood even then). In a series of quick steps from 1952 to 1975, the best value dropped from 500 to 250 to 125 to 50–100 km/sec/Mpc. And there it has remained ever since, with a factor of two uncertainty."
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different methods are an inconvenience to the entire astronomical community, because the value of H enters into our determinations of masses and luminosities of distant objects, of the fraction of the closure density of the universe that can be present in ordinary baryonic matter, and many other things we would like to know. It is not clear that the issue will be firmly resolved in the near future, despite the ever-increasing rate of publications on the subject."

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"An unexceptional German astrolabe of 1537 (IC 262) has two curious features that could make it a striking document connected with Galileo Galilei, one of the world's greatest natural philosophers. The facts are straightforward. Having stated them, I then offer reasoned speculation, which others may develop or try to refute, to show that the astrolabe was modified in Florence and was owned by Galileo in the 1580s."

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An extensive index at the end of v. 2 provides page references to discussions involving astronomy and astrology in other studies, and the bibliography of Wuttke's writings (also in v. 2, p. 769-789) provides details about earlier publication of reprinted essays.

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The text of the four letters, published (in Latin) in the cited book, is not included with the German translation of the essay.

R. S. Freitag
Library of Congress
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