

RECENT PUBLICATIONS RELATING TO THE HISTORY OF ASTRONOMY

Books, Pamphlets, and Special Issues of Periodicals

Astronomical observatories and institutions in Italy. II. [Proceedings of the] eighth annual meeting on the history of astronomy, Napoli, March 29–30, 1996. Edited by E. Proverbio. Cremona, Monotipia cremonese, 1997. 513–780 p. illus., facsims., maps, plans. (Società astronomica italiana. Memorie, v. 68, n. 3, 1997)

Contents: Braccesi, A. Tra ricordi e documenti: radioastronomia e cosmologia a Bologna, 1959–1969.—Proverbio, E. Sul Gabinetto meteorologico e sulla Specola meteorologica e astronomica di Pietro Moscati in Milano.—Carbone, L., G. Cardone, and S. Mancuso. Il fenomeno della variazione della latitudine a corto periodo: gli studi di Arminio Nobile e la controversia con Ernesto Cesàro.—Balestrieri, R. Francesco Porro e l'Osservatorio meteorologico e astronomico dell'Università di Genova.—Tinazzi, M. The published and unpublished works of Pietro Cossali, astronomer, meteorologist, and hydraulic in the Parma University. Manuscripts and correspondence [includes a catalog]—Cristaldi, S., and A. Mangano. On some letters addressed to Annibale Riccò regarding the monument dedicated to the memory of Angelo Secchi.—Colavita, C., and C. Mataix. Galileo e l'Inquisizione in Spagna.—Schettino, E. Il calore radiante della Luna: una prova per l'identità della radiazione termica e luminosa.—Manara, A. Controversie e curiosità sulla nomenclatura dei piccoli pianeti.—Badolati, E. Sopra una formula di Machin.—Banfi, V. Epicycles, from Hipparchus to Chandrasekhar.—Arrighi, G. Su alcune tavole astronomiche della Bibliot[e]ca nazionale braidense di Milano.—Vlora, N. R., and R. Falagario. Il calendario biblico.—Barlai, K. Remarks on the orientation of the medieval church at Kána, Hungary.—Romano, G. Deviazioni negli orientamenti del tipo Sol Aequinoctialis.—Codebò, M. Nuove indagini a Colle Joben (BZ).—Codebò, M. Prime indagini arqueoastroonomiche in Liguria.—Danthoni Neves, M. C. The universe of Ptolemy revisited.—Bònoli, F. L'astronomia a Bologna e il Catalogo del Museo della Specola.—Calabrese, V. L'archivio storico-scientifico dell'Osservatorio astronomico di Torino – Pino Torinese. Prime considerazioni.

Chaperon, Danielle. Camille Flammarion: entre astronomie et littérature. Ouvrage publié avec l'aide de la Faculté des lettres de l'Université de Lausanne. Paris, Éditeurs Imago, 1998. 212 p. illus., map.

Contents: Introduction.—ch. 1. La muse de l'observation.—ch. 2. Les bolides oculaires.—ch. 3. Le cinématographie céleste.—ch. 4. Les ondulations des siècles.—ch. 5. La mémoire cosmique.—ch. 6. La tristesse des astronomes.—ch. 7. La mélancolie scientifique.—ch. 8. Sens exquis et sens obtus.—ch. 9. La sélection des âmes.—ch. 10. Images et mutations.—ch. 11. La lanterne à projections.—ch. 12. Le vulgarisateur irrésistible.—Conclusion.—Chronologie.—Œuvres de Camille Flammarion.—Bibliographie.

Dörr, Stephen. Der älteste Astronomietraktat in französischer Sprache: *L'Introductoire d'astronomie*. Edition und lexikalische Analyse. Tübingen, M. Niemeyer, 1998. 208 p. (Beihefte zur Zeitschrift für romanische Philologie, Bd. 209)

Drakon i Zodiak. Sbornik stateĭ (po materialam konferentsii). Redaktor i sostavitel', È. N. Kaurov. Moskva, Izdatel' N. Z. Shvarfš, 1997g. 100 p. illus. (Paleoastroonomiâ, arkeoastroonomiâ, etnoastroonomiâ)

Contents: Kaurov, È. N. Predislovie sostaviteliâ.—Kaurov, È. N. Sozvezdie Drakona: arkaicheskaĭ sistema astronomicheskikh nablûdenii.—Zhitomirskii, S. V. "ĪAvleniia" Arata. Datirovka i analiz pervoistochnika.—Ershova, G. G. Zodiakal'nyi poiâs v predstavleniĭakh mezoamerikantsĕv.—Karapet'ĭanfš, A. M. Drevnekitaiskii i drevneindiiskii Zodiak.—Raevskii, D. S. Prostranstvo i vremĭa: Zodiak i "zodiaki."—Kaurov, È. N. Prilozhenie: SETI i drevnie sivilisatsii.

Duncan, David E. Calendar: humanity's epic struggle to determine a true and accurate year. New York, Avon Books, 1998. xv, 266 p. illus., port.

- Folley, Tom. *The book of the moon*. With a foreword by Sir Arnold Wolfendale. Philadelphia, Courage Books, 1997. 128 p. illus. (part col., part fold.) (A Quarto book)
 Contents: Introduction.—ch. 1. The wanderer.—ch. 2. Moonbeams and magic.—ch. 3. Key to the universe.—ch. 4. The lunar imagination, by Deirdre O'Day.
- Gaspani, Adriano, *and* Silvia Cernuti. *L'astronomia dei Celti; stelle e misura del tempo tra i Celti*. Aosta, Keltia, 1997. 175 p. illus. (Le Antiche querce, 10)
- Greenstein, George. *Portraits of discovery: profiles in scientific genius*. New York, J. Wiley, 1998. 232 p. illus., ports.
 Partial contents: 1. The ladies of Observatory Hill: Annie Jump Cannon and Cecilia Payne-Gaposchkin.—3. The magician: George Gamow.—8. Our address in the universe: Margaret Geller and John Huchra.
 Essays 1 and 3 were published "in slightly different form" in the *American Scholar*, summer 1993 and winter 1990, and no. 8, in the *Harvard Magazine*, Jan./Feb. 1994.
- Herbst, Klaus D. *Die Entwicklung des Meridiankreises, 1700–1850; Genesis eines astronomischen Hauptinstrumentes unter Berücksichtigung des Wechselverhältnisses zwischen Astronomie, Astro-Technik und Technik*. Bassum, Verlag für Geschichte der Naturwissenschaften und der Technik, 1996. 255 p. illus.
- Hernschiefer, Wolfgang. *Ich wollte, ich wäre ein guter Schuhflicker ... Das unglückliche Leben des bayerischen Astronomen Johann Nepomuck Fischer (1749–1805). Eine dokumentarische Biographie*. Bassum, Verlag für Geschichte der Naturwissenschaften und der Technik, 1997. 77, xxiii p. illus.
- Hey, Anthony J. G., *and* Patrick Walters. *Einstein's mirror*. Cambridge, New York, Cambridge University Press, 1997. 291 p. illus. (part col.), facsims. (part col.), maps, ports.
- Hochsieder, Peter, *and* Doris Knösel. *Les taules a Menorca; un estudi arqueo-astronomic*. Mahon, Institut Menorquí d'Estudis, 1995. 325 p. illus., maps, plans. (Treballs del Museu de Menorca, 14)
 Original title: *Die Taules von Menorca, eine archäoastronomische Forschung*.
- Hofer, Herbert G. *Höhlen als frühe Observatorien; die Entschlüsselung des Labyrinths?* Heimsheim, Jost-Jetter, 1996. 64 p. illus.
- Instruments of science. *An historical encyclopedia*. Editors, Robert Bud, Deborah Jean Warner. New York, The Science Museum, London, and the National Museum of American History, Smithsonian Institution, in association with Garland Pub., 1998. xxv, 709 p. illus., facsims., ports. (Garland encyclopedias in the history of science, v. 2) (Garland reference library of social science, v. 936)
 Among the articles of interest to historians of astronomy and astrophysics are the following: Armillary sphere; Astrolabe; Astrolabe, mariner's; Charge-coupled device; Chronograph; Chronometer; Clock, regulator; Cometarium; Comparator, astronomical; Corona, instruments for observing the; Cosmic ray detector; Cross-staff: Diffraction grating and ruling engine; Dividing engine; Equatorium; Globe; Gravitational radiation detector; Heliostat; Interferometer; Nocturnal; Octant; Orrery; Photometer; Photomultiplier; Photon counter; Planetarium; Quadrant; Sextant; Solar neutrino detector; Spectrometer, gamma ray; Spectroscope (early); Spectroscope, astronomical; Sun-dial; Telescope (early); Telescope (modern); Telescope, new technology; Telescope, radio; Telescope, x-ray; Torquetum; Torsion balance; Transit circle; and Transit instrument.
- Kusukawa, Sachiko. *The transformation of natural philosophy: the case of Philip Melanchthon*. Cambridge, New York, Cambridge University Press, 1995. xv, 246 p. illus., facsims., ports. (Ideas in context, 34)
 The author gives much attention to Melanchthon's interest in astronomy and astrology; see particularly chapters 4 and 5, "The Providence of God" (p. 124–173) and "The Construction of Orthodoxy" (p. 174–200).

- Leopardi, Giacomo. *Storia della astronomia dalla sua origine fino all'anno 1813. Con uno scritto di Armando Massarenti. Un'appendice di Laura Zampieri.* Milano, La Vita felice, 1997. 459 p. (Philobiblon, 2)
- M. N. Saha Centenary Seminar, *Calcutta, 1992.* The glittering spectrum of Meghnad Saha. Proceedings of M. N. Saha Centenary Seminar, 28–30 October 1992. Edited by Jayanta Basu. Calcutta, Saha Institute of Nuclear Physics, 1994. 162 p., [8] leaves (part fold.). illus., port.
- Partial contents: Meghnad Saha and astrophysics. Dutta-Roy, B. Meghnad Saha: his journey to the physics of the stars. Bhattacharyya, J. C. Contributions of M. N. Saha in astrophysics. Abhyankar, K. D. Meghnad Saha and cosmic abundances of elements.—Meghnad Saha and atmospheric & space physics. Sen, A. K. Millimeter waves: solar emission and various applications. Dasgupta, A. Radio astronomy and atmospheric effects. Abstract.—Meghnad Saha and river research & calendar reform. Bandyopadhyay, A. Professor M. N. Saha's contribution to calendar reform.—Socio-economic role of Meghnad Saha. Mukherjee, H. N. Reminiscences on Meghnad Saha. Abstract. [Full paper in Bengali]—Appendices. Appendix I. Bio-data of Meghnad Saha. Appendix II. Scientific papers of Meghnad Saha.
- Norton, O. Richard. *Rocks from space: meteorites and meteorite hunters.* Illustrated by Dorothy S. Norton. 2d ed. Missoula, Mont., Mountain Press Pub. Co., 1998. 447 p., [8] p. of plates. illus. (part col.), maps, ports. (part col.)
- Includes chapters on meteorite showers, the Tunguska event and the Sikhote-Alin fall, Meteor Crater in Arizona, the discovery and recovery of famous meteorites, Harvey Nininger, and Robert Haag, "the meteorite man." There is also a "Selected List of Authenticated Impact Craters Worldwide" (p. 411–413).
- Observatoire astronomique de Strasbourg. *Publications. Série Astronomie et sciences humaines.* no 13. Strasbourg, 1996. 136 p. illus., music, ports.
- Contents: 22ième réunion. Dollfus, A. La grande lunette de Meudon. Proust, D. L'harmonie des sphères. Florsch, A. Les cadrans solaires en Alsace: le vrai, le faux et l'aberrant.—21ième réunion. Andrillat, H. L'univers, de l'antiquité à nos jours. Jaschek, C. Les réunions salmantines d'"Astronomie dans la culture."—20ième réunion. Becker, C. Réflexions épistémologiques sur le temps ou les temps.—19ième réunion. Canguilhem, B. Les rythmes biologiques: de la biologie moléculaire au comportement.
- Oechslin, Ludwig. *Astronomische Uhren und Weltmodelle der Priestermechaniker im 18. Jahrhundert.* Neuchâtel, A. Simonin, 1996. 2 v. + portfolio. illus.
- The text and catalog volumes are accompanied by a portfolio containing mechanical drawings.
- Olson, Roberta J. M., and Jay M. Pasachoff. *Fire in the sky: comets and meteors, the decisive centuries, in British art and science.* Epilogue by Colin Pillinger. Cambridge, New York, Cambridge University Press, 1998. xiv, 369 p., [32] p. of plates. illus. (part col.), facsim. (part col.), ports. (part col.)
- Oriental astronomy from Guo Shoujing to King Sejong. Proceedings of an international conference, Seoul, Korea, 6–11 October 1993. Edited by Nha I.-S., F. Richard Stephenson. Seoul, Yonsei University Press, 1997. 401 p. illus., maps, plans, ports. (part col.)
- Contents: 1. Introductory lectures. Nha, I.-S. Opening address. Stephenson, F. R. The impact of Guo Shoujing and King Sejong on oriental astronomy.—2. Astronomers and history. Bo, S. An outline of Guo Shoujing's astronomical work. Park, S.-R. King Sejong: astronomer-king of Korea, 1397–1450. Cui, S. Astronomy and culture in China. Wu, X. Remarks on the history of astronomy during the period of King Sejong. Kim, O. K. Yi Soonji, a prominent court astronomer of King Sejong. Du, S. Chinese astronomy after Guo Shoujing to the early days of the Ming dynasty.—3. Observatories and astronomical boards. Xu, Z.-T. Two observatories at the beginning of the Ming dynasty. Li, Q. Beijing Astronomical Observatory in the Yuan dynasty. Luan, X.-L., and S. Bo. Yuanzhou ancient observatory as a time service station. Yu, K.-L. A brief history of the Bureau of Astronomy in the Koryo and early Chosŏn dynasties.—4. Comparative studies. Park, S.-R. Pak An-Gi and the Japanese calendar of 1683 by Shibukawa Harumi. Chen,

K.-Y. The east-west interaction: a background to oriental astronomy in the thirteenth-fifteenth centuries. Chen, J.-J. Comparative research between the Huihui calendar, Ch'iljongsan Oepiön and Qizheng Tuibu. Yano, M. Distance of planets in Indian astronomy. Rahimi, M. F. Abu-Rayhan-Birouni, an outstanding Iranian astronomer of the 11th century. Jiang, X. The contact of Chinese and Islamic astronomy in the 13th century.—5. Observation records and modern scientific applications. Hasegawa, I. Daytime fireballs recorded in China and Japan. Kim, Y. Statistics of astronomical records in Korea during AD 1200–1450. Stephenson, F. R. Accuracy of medieval Chinese measurements of lunar and solar eclipse times. Liu, C., and F. R. Stephenson. Some results obtained from a study of the 800 lunar records in the Yuan-shi.—6. Instrumentations. Nha, I.-S. Refined revivals of Guo Shoujing's instruments and the invented instruments made for King Sejong's royal observatory. Leung, K.-C. Ancient astronomical instruments in China. Li, Q. Application of pinhole imaging principle in Guo Shoujing's measurements of tropical year. Situ, D., and S. Yi. The gnomon in the Yuan dynasty and Dengfeng observatory. Yi, S. Re-elaboration on scaphe sundial and scaphe.—7. Star atlases and catalogues. Pan, N. Differences between the constellations as envisaged in ancient China and Korea, and their relations around the Middle Ages. Lee, Y.-S., and K.-K. Park. Computer scanning techniques applied to the 1395 stone star map Ch'önsang Yölcha Bunya Jido. Sun, X., S. Bo., and J. Kistemaker. The Tian Wei Hui Chao star catalogue of the early Ming. Chen, M.-D. A preliminary study of two star charts from the early Ming dynasty of China. Nishiyama, M. Myanmar (Burmese) constellations on old Myanmar sky charts.—8. Timekeeping and calendar making. Nam, M.-H., and S.-W. Jeon. Timekeeping systems of early Chosön dynasty. Hua, T. The water clock of the Ming dynasty. Guo, S. Comparison between Korean Jade Clepsydra and Chinese clepsydras. Lee, E.-H. The Ch'iljongsan Naepiön, an adopted version of the Soushi-li and Datong-li. Kang, Y.-W., and E.-H. Lee. Cross-index of dates used in Chinese, Korean and Japanese calendars for the period, 1401–1450. Okada, Y. The birth and the spread of "kana" calendar. Leung, K.-C., and Y. Lu. The Tianyuan Fawei by Bao Yunlong.—9. Concluding remarks and editor's note. Chen, K.-Y. Concluding remarks. Nha, I.-S. Editor's note: romanization of Chinese, Korean and Japanese terms used in the text.—Appendix. Cross index of dates used in Chinese, Korean and Japanese calendars for the period, 1401–1450.

Papers on the Madrid Codex. Edited by Victoria R. Bricker and Gabrielle Vail. New Orleans, Middle American Research Institute, Tulane University, 1997. 196 p. illus. (Middle American Research Institute. Publication 64)

Contents: 1. Bricker, V. R. The structure of almanacs in the Madrid Codex.—2. Nagy, C. L. von. Some comments on the Madrid deer-hunting almanacs.—3. Vail, G. The deer-trapping almanacs in the Madrid Codex.—4. Bill, C. R. The roles and relationships of God M and other black gods in the codices, with specific reference to pages 50–56 of the Madrid Codex.—5. Graff, D. H. Dating a section of the Madrid Codex: astronomical and iconographical evidence.—6. Bricker, V. R. The "calendar-round" almanac in the Madrid Codex.

Peperoni, Laura, and Marina Zuccoli. *Vultus Uraniae. Raffigurazioni di Urania nella Biblioteca del Dipartimento di Astronomia.* Bologna, Biblioteca Universitaria di Bologna, 1996. 32 p. facsim.

Italian and English in parallel columns.

Contents: La tradizione mitologica. The mythological tradition.—Trattati di astronomia dedicati ad Urania. Astronomical treatises named after Urania.—Jan Hevelius.—Urania nell'iconografia astronomica. Urania in astronomical iconography.—Effemeridi. Ephemerides.—Le suggestioni di Urania nei secoli. Urania's suggestions during the centuries.

Philibert, Myriam. *Stonehenge et son secret.* Monaco, Éditions du Rocher, 1994. 340 p. illus., plans. (Brocéliande)

Contents: Soleil levant sur la Heel Stone.—1. ptie. Stonehenge face à l'histoire. La genèse du site. Les aménagements successifs. Les années obscures. Les travaux récents.—2. ptie. Stonehenge et l'espace-temps. Stonehenge et les îles Britanniques. Stonehenge et son temps. Stonehenge, terre sacrée. Le calendrier de Stonehenge.—3. ptie. Le message de Stonehenge. Les symboles. Les légendes. Initiation et classes sociales. L'initiation supérieure et la tradition.—Un an et un jour. Annexe. Glossaire. Bibliographie. Index géographique.

Problemy prostranstva, vremeni, dvizheniâ. Sbornik trudov IV Mezhdunarodnoï konferentsii, posvâshchennoi 400-letiiu Dekarta i 350-letiiu Leibniŝa. (Sentfâbr' 23–29, 1996, Sankt-Peterburg, Rossiâ.) t. 1. Sankt-Peterburg, Rossiiskaâ akademifa nauk, OAO "SPb-Tekhnologifa," 1997. 200 p. illus.

Contents: ch. 1. Istoriko-filosofskie voprosy estestvoznaniâ. Nevskaiâ, N. I. Dekart, Leibniŝ i Peterburgskaâ astronomicheskaâ shkola XVIII v. Nizovŝev, V. V. Karteziianstvo i problemy sovremennoi fiziki. Kuznetŝova, A. B. Dekart i pervye shagi N'ûtonianstva v Rossii. Baloshina, N. I. U. Filosofskaâ doktrina G. Leibniŝa i ee znachenie dlâ stanovleniâ nauchnoi mysli v Rossii. Malyshev, I. U. M. Kartina mira: kul'turno-istoricheskoe mnogoobrazie i problema sinteza. Zhukov, L. V. Nekotorye trudnosti, svâzannye s vospriâtiem prostranstvenno-vremennykh otnosheniï studentami pedagogicheskogo universiteta.—ch. 2. Aberratsiâ sveta. Parshin, P. F. Klassicheskaiâ teoriâ aberratsii sveta i efekt San'fâka. Tolchel'nikova, S. A. Geometriâ i zvezdnaâ aberratsiâ. Tolchel'nikova-Murri, M. S. Ch. Zvezdnaâ aberratsiâ pri vozroshei tochnosti nablûdenii i pri bol'shikh skorostiâkh dvizheniâ nablûdatelâ. Tolchel'nikova-Murri, S. A., and S. N. Sadzhakova. Zvezdnaâ aberratsiâ v uchebnikakh fiziki i astronomii. Murri, S. A. K voprosu o meste geometrii v estestvoznaniï.—ch. 3. Astronomiâ. Bogdanov, V. I. K voprosu ob anomal'nom smeshchenii perigeliâ orbity Merkuriâ. Renshaw, C. E., and W. M. Kallfelz. The gravitational potential for a moving observer, the perihelion shift of Mercury and photon deflection. I. U. rkina, M. I. Effekt Eilera i nebesnomekhanicheskie vyvody. Karpinskiï, V. N. Sistema struktur na solntŝe i neierarkhichnost'. Browne, P. F. Zero-point radiation and anomalous astrophysical redshifts. Renshaw, C. E. Pulsar timing, superluminal jets and the special theory of relativity. Bursha, M., G. V. Dem'fanov, and M. I. I. U. rkina. Ob opredelenii modeli zemli—obshchego zemnogo ellipsoida. Smirnov, B. N., and S. A. Tolchel'nikova-Murri. Mozhno li opredelit' inertŝial'noe dvizhenie solnechnoi sistemy, opiraiâs' na ideiu Maksvella?

Each paper is preceded by an abstract in English.

Razvoj astronomije kod Srba. Development of astronomy among Serbs. Edited by M. S. Dimitrijević, J. Milogradov-Turin and L. C. Popović. Beograd, 1997. 275 p. illus., ports. (Publikacije Astronomske opservatorije u Beogradu, sv. 56)

Proceedings of a conference held Apr. 7–9, 1997, in Belgrade. Each paper is followed by an abstract in English.

Contents: Kanazir, D. Proslava 110 godina Astronomske opservatorije 7. 4. 1997.—Dimitrijević, M. S. 110 godina Astronomske opservatorije.—Dimitrijević, M. S. Razvoj astronomije kod Srba od početka XVIII veka do prvog svetskog rata.—Tadić, M. Nacrt za katalog naših sunčanika.—Francisti, J. Prvi članak u srpskoj štampi o pojavi Halejeve komete na našem nebu.—Trajkovska, V., and S. Ninković. Lokijerova "Astronomija" kod Srba u drugoj polovini XIX veka.—Đokić, M. Neke primedbe o osnivačkom aktu opservatorije Velike škole u Beogradu.—Milogradov-Turin, J. Jedan prilog istoriji Katedre z astronomiju Univerziteta u Beogradu.—Popović, L. Č. Razvoj i aktivnosti Astronomske grupe "Ruder Bošković."—Francisti, J. Astronomske društvo "Novi Sad"—ADNOS.—Babović, V. Multidisciplinarnost u razvoju Belerofonta.—Salim, S. Astronomija u Istrazivačkoj stanici Petnica.—Gajić, D. Ž. Astronomija i astrofizika na univerzitetu u Nišu.—Sekulić, M. Astronomske društvo "Alfa"—Niš.—Naumovski, K., and M. Bracić. Astronomske društvo u Zrenjaninu.—Dimitrijević, M. S. Đorđe Stanojević prvi srpski astrofizičar.—Milićević, V. Naučni rad Milutina Milankovića.—Arsenijević, J., A. Kubičela, and A. Oskanjan. Oskanjan—osnivanje i rad grupe za astrofiziku.—Popović, G. M. Naučni i stručni rad Pera M. Đurkovića.—Pakvor, I. Naučna i stručna delatnost mr Milana Mijatova.—Đorđević, R. Milankovićeve filozofske ideje i njihova aktuelnost.—Jovanović, B. D. Nastava iz astronomije kod nas, I.—Tomić, A. Takmičenje učenika iz astronomije u Srbiji 1965–1996. godine.—Milogradov-Turin, J. Astronomija na seminarima za nastavnike u Srbiji.—Dačić, M., and Z. Cvetković. O posmatranjima zvezda DS programa na Meridijanskom krugu u Beogradu.—Kubičela, A., and J. Arsenijević. Ekspedicija Astronomske opservatorije za posmatranje potpunog pomračenja Sunca 1961.

Reeves, Hubert. Intimes convictions. Entretiens avec André Comte-Sponville, Sylvie Bonnet, Véronique Chica, Charles Juliet, François Bon, Gilles Derome. Vénissieux, Éditions Paroles d'aube, 1997. 91 p. ports.

- Reis, António E. dos. O único exemplar vivo do nóio de Pedro Nunes? Lisboa, Academia de Marinha, 1995. 44 p. illus.
- Schiaparelli, Giovanni V. Scritti sulla storia della astronomia antica. t. 1. Scritti editi. pt. 1. Milano, Mimesis, 1997. 462 p. illus.
Reprint of the 1925 edition.
- Schwaetzer, Harald. "Si nulla esset in terra anima." Johannes Keplers Seelenlehre als Grundlage seines Wissenschaftsverständnisses. Ein Beitrag zum vierten Buch der Harmonice Mundi. Hildesheim, New York, G. Olms, 1997. 336 p. (Studien und Materialien zur Geschichte der Philosophie, Bd. 44)
- Śnieżyńska-Stolot, Ewa. Ikonografia znaków zodiaku i gwiazdozbiorów w średniowieczu. [Redaktor, Henryk Babral] Kraków, Wydawn. i Druk. "Secesja," 1994. 85, [2] p. illus.
English summary: p. [86]
- Sollbach, Gerhard E. Die mittelalterliche Lehre vom Mikrokosmos und Makrokosmos. Hamburg, Verlag Dr. Kovač, 1995. 131 p. facsims.
- Souden, David. Stonehenge revealed. New York, Facts on File, 1997. 160 p. illus. (part col.), col. maps, plans (part col.), ports. (part col.)
See particularly the chapter entitled "Ritual and the Heavens" (p. 118–139).
- Šprajc, Ivan. La estrella de Quetzalcóatl: el planeta Venus en Mesoamérica. México, D.F., Editorial Diana, 1996. 224 p., [32] p. of plates. illus. (part col.), col. facsims., plan. (Arqueoastronomía)
Contents: Prólogo.—Introducción.—1. Los itinerarios del astro errante.—2. Los libros sagrados.—3. Lluvia y maíz.—4. La guerra y el sacrificio.—5. Ideas y orígenes.—Reflexiones finales.
- Stautz, Burkhard. Untersuchungen von mathematisch-astronomischen Darstellungen auf mittelalterlichen Astrolabien islamischer und europäischer Herkunft. Bassum, Verlag für Geschichte der Naturwissenschaften und der Technik, 1997. 287 p. illus.
English summary: p. 123–124.
- Swerdlow, Noel M. The Babylonian theory of the planets. Princeton, N.J., Princeton University Press, 1998. xv, 246 p. illus.
- Symposium: Astronomy at the Dawn of the Renaissance, *Liège, 1997*. [Proceedings] Edited by Raymond Mercier. Cambridge, Science History Publications, 1998. 91–210 p. illus. (Journal for the history of astronomy, v. 29, pt. 2)
Contents: Samsó, J. An outline of the history of Maghribi zijes from the end of the thirteenth century.—Pingree, D. Some fourteenth-century Byzantine astronomical texts.—Tihon, A. The astronomy of George Gemistus Plethon.—Mercier, R. The astronomical tables of George Gemistus Plethon.—Kokott, W. Syzygies as pivots: an unusual mid-fifteenth-century working ephemeris.—Langermann, Y. T. Peurbach in the Hebrew tradition.—Federici Vescovini, G. The place of the sun in medieval Arabo-Latin astronomy: the *Lucidator dubitabilium astronomiae* (1303–10) of Peter de Padua.—Shank, M. H. Regiomontanus and homocentric astronomy.—Chabás, J. Astronomy in Salamanca in the mid-fifteenth century: the *Tabulae resolutae*.—Goldstein, B. R. Abraham Zacut and the medieval Hebrew astronomical tradition.—Kremer, R. L., and J. Dobrzycki. Alfonsine meridians: tradition versus experience in astronomical practice c. 1500.—Pouille, E., and D. Savoie. La survie de l'astronomie alphonisine.—Notes on contributors.
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- Uppgren, Arthur R. *Night has a thousand eyes; a naked-eye guide to the sky, its science, and lore.* New York, Plenum Press, 1998. 301 p. illus.
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- Veenstra, Jan. R. *Magic and divination at the courts of Burgundy and France. Text and context of Laurens Pignon's Contre les devineurs (1411).* Leiden, New York, Brill, 1998. 433 p. (Brill's studies in intellectual history, v. 83)
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Workshop on Heritage of Ancient Indian Astronomy, *Pune, 1994.* Proceedings of the Workshop on Heritage of Ancient Indian Astronomy, IUCAA, Pune, October 31-November 4, 1994. Bangalore, 1998. 132 p. illus., port. (Bharatiya Jyotir Vijyan Parishad. Bulletin of the Astronomical Society of India, v. 26, Mar. 1998)

Contents: Rao, N. K. Frontispiece: Sun temple at Modhera.—Krishan, V. A dedication: Narayana Chandra Rana.—Abhyankar, K. D. Foreword.—Sarma, K. V. The Pañcasiddhāntikā of Varāhamihira: a puzzling problem in its presently available text.—Ramasubramanian, K. Model of planetary motion in the works of Kerala astronomers.—Naik, P. C., and L. Satpathy. Samanta Chandra Sekhar [1835–1904]: the great naked eye astronomer.—Holay, P. V. The distinctive features of Rik-Jyotisha.—Abhyankar, K. D. Antiquity of the vedic calendar.—Abhyankar, K. D. On the Pre-Siddhantic evolution of the Indian calendar.—Sharma, S. D. Development of Pañcanga from vedic times upto the present.—Holay, P. V. Vedic astronomers.—Sidharth, B. G. The calendric astronomy of the vedas.—Ghanekar, B. Some thoughts on Bhadra Chowkon and Ankapasha in Indian mathematics.—Ratna, V. An improved gnomon.

A color photograph of the sun temple at Modhera is reproduced on the outside front cover of the issue.

Articles, Including Essays in Books and Papers in Proceedings

Abhyankar, Krishna D. The origin of the solar system. *In* Bharatiya Jyotir Vijyan Parishad. Bulletin of the Astronomical Society of India, v. 26, June 1998: 339–348. illus.

“This is a historical review of the development of the ideas about the origin of the solar system starting from the nebular hypothesis of Kant and Laplace.”

About Samuil Aronovich Kaplan (1921–1978). *Astrophysics and space science*, v. 252, no. 1/2, 1997: 19–21. A portrait of Kaplan appears on the page facing p. 1 of the issue.

About Solomon Borisovich Pikel'ner (1921–1975). *Astrophysics and space science*, v. 252, no. 1/2, 1997: 15–18.

A portrait of Pikel'ner appears on the page facing p. 1 of the issue.

Albani, Matthias, *and* Uwe Glessmer. Un instrument de mesures astronomiques à Qumrân. *Revue biblique*, t. 104, janv. 1997: 88–115. illus.

“This unique object found at Qumrân in 1954, is an instrument which can measure the solstitial and equinoctial points and the horizontal direction of the sun by different circles with graduation in correspondence to seasons. This allows time-keeping of fractions of the day in form of watches or seasonal hours. Knowledge of the ratio between length of day to night builds the basis for astronomical observations as well as for practicability of 364 day-calendars known from Qumrân Texts.”

Albani, Matthias. “Das Werk seiner Hände verkündigt die Feste”. Die doxologische Bedeutung des Sonnenlaufes in Psalm 19. *In* Gottes Ehre erzählen. Festschrift für Hans Seidel zum 65. Geburtstag, hrsg. von Matthias Albani und Timotheus Arndt. Leipzig, Thomas Verlag, 1994. p. 237–256. illus.

- Aller, Lawrence H. Early days of planetary nebular theory. *In* International Astronomical Union. Symposium, 180th, Groningen, 1996. Planetary nebulae. Proceedings of the 180th symposium of the International Astronomical Union, held in Groningen, the Netherlands, August 26–30, 1996. Edited by H. J. Habing and H. J. G. L. M. Lamers. Dordrecht, Boston, Kluwer Academic Publishers, 1997. p. 3–9.
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Abstract in English.
- Arnold, Marie M. Adolphe Quetelet: fondateur de l’Observatoire de Bruxelles. *Athena*, no 103, sept. 1994: 21–22. illus., port. (Savants)
- Arnold, Marie M. Marcel Dehalu [1873–1960]: le cœur dans les étoiles. *Athena*, no 131, mai 1997: 426–428. (Savants)
- Aschenbach, Bernd, Hermann M. Hahn, and Joachim Trümper. The history of X-ray astronomy. *In their* The invisible sky; ROSAT and the age of X-ray astronomy. Translated by Helmut Jenkner. New York, Copernicus, an imprint of Springer-Verlag, 1998. p. 17–35. illus. (part col.), ports.
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- Bakhouche, Béatrice. La transmission du Timée dans le monde latin. *In* Les Voies de la science grecque. Études sur la transmission des textes de l’Antiquité au dix-neuvième siècle. Publiées sous la direction de Danielle Jacquart. Genève, Librairie Droz, 1997. (Hautes études médiévales et modernes, 78) p. 1–31.
- Barbieri, Francesco, and Franca Cattelani Degani. Tre lettere di Geminiano Montanari a Gian Domenico Cassini. *Nuncius*, anno 12, fasc. 2, 1997: 433–441. facsim.
The text of the letters appears on p. 436–441.
Summary in English.
- Bares, Juan de D. El “reto de Platón.” *In* La Ciencia de los filósofos. Juan Arana (ed.). Sevilla, Universidad de Sevilla, Departamento de Filosofía, 1996. (Thémata, revista de filosofía, no. 17) p. 27–43.
Abstract in English.
- Barham, Jeffrey. The Leonids from Cambridge in 1799. *In* British Astronomical Association, *London Journal*, v. 108, June 1998: 136.
Letter quoting a recently unearthed report published in the *Cambridge Chronicle* of Nov. 23, 1799.
- Basello, Gian P. Giovanni Schiaparelli: storico dell’astronomia e uomo di cultura. *Giornale di astronomia*, v. 23, dic. 1997: 30–31.
Briefly summarizes proceedings of a “seminario di studi” on Schiaparelli and his interest in the astronomy of the ancient Orient, held May 12–13, 1997, at the Brera Observatory. Papers were presented by Hermann Hunger and Salvo De Meis, Antonio Panaino, Agnese Mandrino, Luigi Cagni, Maria Casaburi, Guido Pellegrini and Giuseppe Bezza, and Raffaella Simili.
- Bejarano Escanilla, Ingrid. Orientaciones por astros y por vientos. *In* Al-Andalus y el Mediterráneo. Barcelona, Lunwerg Editores, 1995. p. 259–276. col. illus., facsim. (part col.)
Other illustrations relating to the history of astronomy can be found elsewhere in the volume, on p. 50, 60, 81, 82, 84, 128, 129, 134, 136, 137, 157, 171, 172–173, 187, 208, 211, 231, 250, 290, 305, 306, 307, and 313.

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 “Fellow of the RAS, researcher and educator; advocate, nationally and internationally, of observational astronomy.”
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- Bonnell, J. T., *and* R. W. Klebesadel. A brief history of the discovery of cosmic gamma-ray bursts. In *Gamma-ray bursts*. 3rd Huntsville symposium, Huntsville, AL October 1995. Editors: Chrysta Kouveliotou, Michael F. [i.e. S.] Briggs, Gerald J. Fishman. pt. 2. Woodbury, N.Y., AIP Press, 1996. (AIP conference proceedings, 384) p. 977–980. illus.
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- Brind’Amour, Pierre. L’horoscope de l’avènement de Néron. In *Mélanges offerts en hommage au Révérend Père Rodrigue LaRue, OFM*. Sous la direction de Florent Tremblay. Trois-Rivières, Université du Québec à Trois-Rivières, 1991. (Cahiers des études anciennes, no 25) p. 135–151.
- Brück, Mary T. Mary Ackworth Evershed née Orr (1867–1949), solar physicist and Dante scholar. *Journal of astronomical history and heritage*, v. 1, June 1998: 45–59. illus., ports.
- Brunet, Jean P., Robert Nadal, *and* Claude Vibert-Guigue. The fresco of the cupola of Qusayr ‘Amra. *Centaurus*, v. 40, no. 2, 1998: 97–123. illus.
 “Paintings of the baths of Qusayr ‘Amra (Jordan), being copied at present, include a *calarium* topped by a cupola on which the heavens are represented.”
- Bucciantini, Massimo. A difficult legacy: Galileo and the Galilean Collection between myth and history. *Nuncius*, anno 12, fasc. 2, 1997: 311–328.
 “The principal aim of this article is to reveal the political and cultural significance of the constitution of the Galilean Collection as part of a battle to rehabilitate Galileo as a Copernican philosopher and scientist.”
- Burns, William E. Whigs, astrologers and millenarians. *Center & Clark newsletter*, no. 31, spring 1998: 4–5. illus.
 Describes his research at the William Andrews Clark Memorial Library (UCLA), which involves a study of “astrology and politics in Restoration England.” He finds “that millenarianism and astrology were both important parts of the culture of Whig politics and that inclusive histories of Whig ideology must address the role played by systems of thought which do not fit into the modern definition of political rationality.”
- Caplan, James. Historical conservation at the Marseille Observatory. *Mitteilungen zur Astronomiegeschichte*, Nr. 12, Juni 1998: 1.
- Castor, John J. A celebration of the contributions of Art Cox to stellar pulsation interpretations. In *A Half century of stellar pulsation interpretations: a tribute to Arthur N. Cox*. Proceedings of a conference held in Los Alamos, New Mexico, 16–20 June 1997. Edited by P. A. Bradley and J. A. Guzik. San Francisco, Astronomical Society of the Pacific, 1998. (Astronomical Society of the Pacific conference series, v. 135) p. 1–11. illus., port.

See also, on p. xxxi-xxxii of the volume, "A Brief Biography of Arthur Nelson Cox," by J. Paul Mutschlecner and David S. King, illustrated with a portrait.

- Chabás, José, *and* Antoni Roca. Early printing of astronomy: the *Lunari* of Bernat de Granollachs. *Centaurus*, v. 40, no. 2, 1998: 124–134. facsim.
- Chapman, Allan. Cosmology. *Astronomy now*, v. 12, Apr. 1998: 41–44. col. illus., facsim., port.
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- Creese, Mary R. S. Chapter 10. Observers, "computers," interpreters, and popularizers: women in astronomy. *In her* Ladies in the laboratory? American and British women in science, 1800–1900; a survey of their contributions to research. Lanham, Md., Scarecrow Press, 1998. p. 225–249.
"Bibliography of Papers by American and British Women in Scientific Periodicals, 1800–1900. Part 2. Mathematical, Physical, and Earth Sciences. Astronomy": p. 407–412. Some of the women whose writings are included in this section of the bibliography are discussed in chapter 8, "Mathematicians and Statisticians, Mainly of the 1890s, but Remembering Mary Somerville."
- Cruz, Víctor de la. Los nombres de los días en el calendario zapotec *piye* en comparación con el calendario nahua. *In* Estudios de cultura náhuatl. v. 25; 1995. México, D.F., Universidad Nacional Autónoma de México, Instituto de Investigaciones Históricas. p. 149–176.
- Darnell, Per B. Bothkampobservatoriet. *Astronomisk tidsskrift*, årg. 31, mars 1998: 30–33. illus. (part col.)
"Astronomi i de tidligers danske landområder syd for grænsen."
- Darnell, Per B. Professor Schrader og hans store teleskoper. *Astronomisk tidsskrift*, årg. 31, juni 1998: 25–28. facsim., port.
About Johann Gottlieb Friedrich Schrader (1763–1832?).
- Débarbat, Suzanne V., Josette Alexandre, *and* Nandou Daliès. Unpublished Messier celestial maps for representing the trajectory of comets. *In* International Conference on the History of Cartography, 16th, Vienna, 1995. Abstracts; curricula vitae. Edited by Ingrid Kretschmer. Vienna, 1995. p. 76.
- Dekker, Elly, *and* Gerard L'E. Turner. An unusual Elizabethan silver globe by Charles Whitwell. *In* The Antiquaries journal. v. 77; 1997. London, Society of Antiquaries of London. p. 393–401. illus.
"The single sphere is constructed out of two silver hemispheres which are joined at the equator by three bayonet catches ... The outer surface is engraved with a map of the world; at least 900 holes of different sizes have also been drilled into the surface from the outside, representing the starry sky. Evidently this globe was intended to be used whole as a terrestrial sphere as well as in two parts in order to see, from the inside, the stars against a background light, exactly as seen from the Earth ..."
The globe, from the Bonnefoy collection, "was acquired by Sir James Caird, who presented it to the National Maritime Museum."
- Dick, Steven J. Observation and interpretation of the Leonid meteors over the last millennium. *Journal of astronomical history and heritage*, v. 1, June 1998: 1–20. illus., ports.
- Dimitrijević, Milan S. Milutin Milanković in Science Citation Index 1946–1996. *Bulletin astronomique de Belgrade*, no 156, 1997: 205–241.
Includes a listing of 522 citations, arranged chronologically under references to the 17 works by Milanković to which they relate.

- Dobbins, Thomas A., and Richard M. Baum. Observing a fictional Moon. *Sky & telescope*, v. 95, June 1998: 105–109. illus. (part col.), ports. (Observer's log)
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- Dobronravín, P. P. Vospominaniia ob Andree Borisoviche Severnom. *Izvestiia Krymskoï astrofizicheskoi observatorii*, t. 92, 1995: 8–11.
 An English translation, "Recollections of Andrei Borisovich Severnyi," appears in the *Bulletin of the Crimean Astrophysical Observatory*, v. 92, 1995, p. 4–6.
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 Contents: Savoie, D. L'ancien cadran solaire de la colonne Catherine de Médicis à Paris.—Valdés Carracedo, M. M. Les chemins de Saint-Jacques et les cadrans canoniaux.—Cornec, J. P. L'inventaire des cadrans solaires français: la base de données informatique.—Hibon, M. Bonnes feuilles; ou, "Un cadran solaire original."
 Another illustration appears on the outside front cover of the issue (caption on p. 37).
- Dumont, Simone, and Suzanne V. Débarbat. Two scientists as cartographer pilgrims in Central and Eastern Europe: Delisle and Cassini. *In International Conference on the History of Cartography, 16th, Vienna, 1995. Abstracts; curricula vitae.* Edited by Ingrid Kretschmer. Vienna, 1995. p. 42.
- Dworetsky, Michael M., and S. J. Fossey. Lunar occultations of Jupiter and Saturn, and the star of Bethlehem. *Observatory*, v. 118, Feb. 1998: 22–24.
 In connection with Molnar's proposal of two "astrologically significant lunar occultations of Jupiter in Aries on 6 BC March 20 and April 17" the authors "report the identification of further contemporary astronomical events, a pair of occultations of Saturn in Pisces, which may be capable of astrological interpretations as 'omens' supporting Molnar's hypothesis."
- Dwyer, Christopher. Laplace—the supreme calculator. *Astronomy now*, v. 12, May 1998: 52–53. col. illus., port.
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- Dyson, John E. Franz Kahn 1926–1998. *Physics world*, v. 11, May 1998: 58–59. port.
- Egger, Fritz. Fritz Zwicky—100 Jahre. *Orion*, 56. Jahrg., Apr. 1998: 8.
- Ehrenstein, David. Astrophysicist dies in plane crash. *Science*, v. 279, Jan. 2, 1998: 22. port.
 On the death of David Schramm.
- Engström, Jan. and Panu Nykänen. New interpretations of Viking Age weathervanes. *In Vitterhets, historie och antikvitets akademien, Stockholm. Fornvännen, tidskrift för svensk antikvarisk forskning*, årg. 91, häfte 3, 1996: 137–142.
 "The famous Viking Age weathervanes which have been found in Sweden, Norway and Finland are re-examined. The authors claim that weathervanes were not merely *objets d'art* or symbols of rank but also played an important part as navigation instruments. Weathervanes were used as angle measuring devices for estimating the height of the sun or stars above the horizon. Later on the weathervane was adopted by the Christian Church and its original use was forgotten."

- Ernst, Germana. "Veritatis amor dulcissimus". Aspetti dell'astrologia in Cardano. In *Girolamo Cardano: Philosoph, Naturforscher, Arzt*. Hrsg. von Eckhard Kessler. Wiesbaden, Harrassowitz in Kommission, 1994. (Wolfenbütteler Abhandlungen zur Renaissanceforschung, Bd. 15) p. 157–184.
- Fälthammar, Carl G., and Alan J. Dressler. Hannes Alfvén (1908–1995). *Eos*, v. 76, Sept. 26, 1995: 385–387. ports.
- Farinella, Calogero. Da Montesquieu a Lalande. Antonio Cagnoli e una specola privata del Settecento. In *Studi settecenteschi*. nuova ser., n. 17; 1997. Napoli, Bibliopolis. p. 227–264.
Contents: 1. Dagli "studi morali" all'astronomia.—2. L'"ammirabile sistema newtoniano."—3. "Una specola unica completa in Italia a spese private."
- Fatoohi, Louay J., F. Richard Stephenson, and Shetha S. Al-Dargazelli. The Danjon limit of first visibility of the lunar crescent. *Observatory*, v. 118, Apr. 1998: 65–72. illus.
- Field, George B. Lyman Spitzer, Jr. (1914–1997). In *Astronomical Society of the Pacific. Publications*, v. 110, Mar. 1998: 215–222. illus., ports.
- Fritz Zwicky (1898–1974): een excentrieke rebel. *Zenit*, 25. jaarg., feb. 1998: 56. illus., port.
- Fuentes, Patrick. Les astronomes en plein vent. *L'Astronomie*, v. 112, mars 1998: 92–96. illus.
"Dès le début du XIX^e siècle, quand la douceur du soir et la pureté du ciel le permettent, un petit métier fait son apparition à la tombée de la nuit: l'astronome en plein vent."
- Gerl, Armin. Wilhelm von Hirsau—Mönch und Astronom (ca. 1030–1091). In *Berühmte Regensburger; Lebensbilder aus zwei Jahrtausenden*. Hrsg. von Karlheinz Dietz und Gerhard H. Waldherr. Regensburg, Universitätsverlag Regensburg, 1997. p. 43–53. illus.
- Geyer, Edward H. Historische Anmerkungen zur Sternfleckenhypothese. In *Solar and galactic magnetic fields. Proceedings of a workshop held in Göttingen, 2–3 February 1995*. [Hrsg.] von D. Schmitt und H.-H. Voigt. Göttingen, Vandenhoeck & Ruprecht, 1996. (Nachrichten der Akademie der Wissenschaften in Göttingen. II. Mathematisch-Physikalische Klasse. Jahrg. 1996, Nr. 4) p. 38–44.
- Gingerich, Owen, and James R. Voelkel. Tycho Brahe's Copernican campaign. *Journal for the history of astronomy*, v. 29, Feb. 1998: 1–34. illus., facsim.
- Ginzburg, Vitalii L. Cosmic ray astrophysics (history and general review). In *Cosmic ray, particle and astroparticle physics. A conference in honour of Giuseppe Occhialini, Bruno Pontecorvo and Bruno Rossi*. (Florence, 11–13 september 1995.) Edited by A. Bonetti, I. Guidi, B. Monteleoni. Roma, Accademia nazionale dei Lincei, 1997. (Atti dei convegni lincei, 133) p. 29–54. illus.
- Glessmer, Uwe. The Otot-texts (4Q319) and the problem of intercalations in the context of the 364-day calendar. In *Qumranseminar, Münster in Westfalen, 1993*. Qumranstudien; Vorträge und Beiträge der Teilnehmer des Qumranseminars auf dem internationalen Treffen der Society of Biblical Literature, Münster, 25.–26. Juli 1993. Hrsg. von Heinz-Josef Fabry, Armin Lange und Hermann Lichtenberger. Göttingen, Vandenhoeck & Ruprecht, 1996. (Schriften des Institutum Judaicum Delitzschianum, Bd. 4) p. 125–164.
- González González, Francisco J. El Almanaque Náutico y la difusión de la astronomía en la España de la primera mitad del siglo XIX: trabajos publicados (1795–1845). *Revista de historia naval*, año 13, 4. trimestre 1995: 33–58. illus., facsim.
Includes an annotated list of the astronomical papers published in the *Almanaque* during the period in question, followed by brief sketches of most of the authors represented.

- Graham, Rex. Larger than life. *Astronomy*, v. 26, June 1998: 44–47. col. ports.
 “David N. Schramm, 1945–1997. A creative cosmologist who combined opposites.”
 See also the letters from Randall Wehler, Christopher Buck, and Ken Croswell in the Aug. 1998 issue, p. 14.
- Graham, Rex. Making an exceptional impact. *Astronomy*, v. 26, May 1998: 36–41. col. illus., ports. (part col.)
 “A self-described ‘rock-knocking geologist,’ planetary scientist Eugene Shoemaker showed that Earth and the rest of the solar system were prone to violent impacts.”
- Graham-Smith, Sir Francis. Hubert Gent, 1922–1997. *Astronomy & geophysics*, v. 39, Apr. 1998: 38. col. port.
 “Fellow of the RAS, radio astronomer and pioneer of the interferometer for position measurements.”
- Grasshoff, Gerd. Modelling the astrophysical object SS433—methodology of model construction by a research collective. *Philosophiae naturalis*, Bd. 15, Heft 1, 1998: 161–199. illus.
- Gros, Monique. Bernard Lyot (1897–1952). *L’Astronomie*, v. 112, janv. 1998: 8–12. illus., ports. (Commemoration)
- Gutzwiller, Martin C. Moon-Earth-Sun: the oldest three-body problem. *Reviews of modern physics*, v. 70, Apr. 1998: 589–639. illus.
 “The three-body problem, especially when in [sic] involves objects with large masses like the Moon, the Earth, and the Sun, has been a favorite topic of discussion for physicists, mathematicians, and astronomers for some 350 years. This article reviews the theoretical attention given to the problem both before and after Newton’s discussion in his *Principia* in 1687. Although modern technology in connection with the space program has improved our ability to observe the system, our understanding of its dynamics is not as yet complete.”
- Habashi, Fathi. Meteorites: history, mineralogy, and metallurgy. *Interdisciplinary science reviews*, v. 23, Mar. 1998: 71–81. illus., ports.
- Hamel, Jürgen. Nachruf: Diedrich Wattenberg †. 1909–1996. *In Astronomische Gesellschaft. Mitteilungen*. Nr. 80. Hamburg, 1997. p. 19–21. port.
- Hearnshaw, John B. Obituary: Frank Bradshaw Wood (1915–97). *Southern stars*, v. 37, Mar. 1998: 225–227. port.
- Heigl, Peter. Johannes Kepler. *In his Regensburg privat, von Albertus Magnus bis Oskar Schindler; ein Gang durch die Stadt*. Regensburg, Verlag F. Pustet, 1997. p. 63–67. illus.
 The illustrations show the Kepler memorial and the house where Kepler lived. A map of the city center on the back endpapers shows the location of both sites.
- Heller, Michał. Einstein i wszechświat. *Postępy astronomii*, t. 45, stycz./mar. 1997: 4–9. illus., port.
- Heller, Michał. Kosmolog z Petersburga. *Postępy astronomii*, t. 45, kwiec./czerw. 1997: 4–7. port.
 About Alexander A. Friedmann.
- Henry, Holly. New worlds in focus. *Research/Penn State*, v. 19, Jan. 1998: 4–5. col. illus.
 Concerns the effects on Virginia Woolf’s imagination of “Hubble’s radical reconfiguration of the universe” as presented in the popular writings of Sir James Jeans.
- Hingley, Peter D. The will of Sir William Herschel. *Astronomy & geophysics*, v. 39, June 1998: 7. col. illus. (From the RAS Archives)

- Hoffleit, Dorrit. Helen Meriwether Lewis Thomas, 21 August 1905–6 August 1997. *Isis*, v. 89, June 1998: 316–317. port.
- Hoffleit, Dorrit. History of the discovery of Mira stars. *In American Association of Variable Star Observers. Journal*, v. 25, no. 2, 1997: 115–136. illus.
- Hoffmann, Karl F. Nachruf: Horst-Burkhard Brenske †. 1919–1995. *In Astronomische Gesellschaft. Mitteilungen*. Nr. 80. Hamburg, 1997. p. 13–14. port.
- Horn, Dara. The shoulders of giants. *Science*, v. 280, May 29, 1998: 1354–1355. col. illus., port. (Essays on science and society)
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