

Introductory literature on the history of Islamic astronomy

For a quick survey, the following article is still useful: E.S. Kennedy, The Arabic Heritage in the Exact Sciences, *Al-Abhath* 23 (1970), pp. 327-344. This and other articles by E.S. Kennedy were reprinted in E.S. Kennedy, Colleagues and Students, *Studies in the Islamic Exact Sciences*, Beirut 1983. See also the collections of articles by D.A. King in *Islamic Mathematical Astronomy, Islamic Astronomical Instruments, Astronomy in the Service of Islam*, London 1986, 1987, Aldershot 1993: Variorum Reprints. For the Ptolemaic system see Olaf Pedersen, *A Survey of the Almagest*, Odense 1974. A very good exposition by one of the masters of Islamic astronomy himself is: R. Ramsay Wright (trans.), *The Book of Instruction in the Elements of the Art of Astrology* by al-Bīrūnī. London 1934. 699 pp. Reprinted: Frankfurt 1998 (Islamic Mathematics and Astronomy. 29)

Further literature which has been cited in the lecture:

E.S. Kennedy, *A survey of Islamic Astronomical Tables*, Philadelphia: American Philosophical Society, 1956.

D.A. King, J.Samsó, B.Goldstein, Astronomical Handbooks and Tables from the Islamic world (750-1900): an Interim Report, *Suhayl: Journal for the History of the Exact and Natural Sciences in Islamic Civilization* 2 2001, pp. 9-106.

B.A. Rosenfeld, E. Ihsanoglu, *Mathematicians, Astronomers and Other Scholars of Islamic civilization and their works (7th-19th c.)*, Iatanbul: IR-CICA, 2003.

Fuat Sezgin, *Geschichte des arabischen Schrifttums*, Band 6, Astronomie bis ca. 430 H. Leiden: Brill, 1978.

Aydin Sayılı, *The Observatory in Islam and its Place in the General History of the Observatory*, Ankara 1960, 427 pp. , reprinted Frankfurt 1998 (Islamic Mathematics and Astronomy vol. 97).

Anton Heinen, *Islamic Cosmology. A study of as-Suyutis al-Hay'a as-sunniya fi l-hay'a as-sunniya with critical edition, translation and commentary*. Beirut texte und Studien no. 27, 1982.

Nallino, Carlo Alfonso [Ed.]: *Al-Battânî (d. 929) sive Albatanii Opus Astronomicum. Ad fidem codicis escurialensis arabice editum*. I-II. Latin translation and commentary. III. Arabic text. Rome, Milan 1899-1907. Reprinted Frankfurt 1997, Islamic Mathematics and Astronomy. 11-13.

Abu'l-Rayḥān al-Bīrūnī, al-Qānūnu'l-Mas'ūdī, An Encyclopaedia of Astronomical Sciences, Hyderabad (India): Osmania Oriental Publications Bureau, 1954-1956, 3 vols.

Aby Raïchan Beryni (973-1048), *Izbrannye Proizvedeniya*, part 5, Kanun Mas'ūda, 2 vols. Translated by B.A. Rosenfeld and A. Akhmedov. Tashkent 1976.

E.S. Kennedy, Al-Bīrūnī's Masudic Canon, *Al-Abhāth* **24**, 1971, pp. 59-81, reprinted in E.S. Kennedy, Colleagues and Students, *Studies in the Islamic Exact Sciences*, Beirut 1983, pp. 573-595.

F.J. Ragep, *Naṣīr al-Dīn al-Ṭūsī's Memoir on astronomy* Al-Tadhkira fī 'ilm al-Hay'a, New York: Springer 1993, 2 vols.

For the mathematical equivalence of geocentric and heliocentric motion see the article Derek J. de S. Price, Contra-Copernicus: A Critical Re-estimation of the Mathematical Planetary Theory of Ptolemy, Copernicus and Kepler, in: Marshall Clagett, ed., *Critical Problems in the History of Science*. Madison: University of Wisconsin Press, 1969, pp. 197-218.