

From: Thomas Hockey et al. (eds.). *The Biographical Encyclopedia of Astronomers*, Springer Reference. New York: Springer, 2007, p. 1110

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science+business media

[http://dx.doi.org/10.1007/978-0-387-30400-7\\_1346](http://dx.doi.org/10.1007/978-0-387-30400-7_1346)

## Şūfī: Abū al-Ḥusayn ‘Abd al-Raḥmān ibn ‘Umar al-Şūfī

Paul Kunitzsch

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**Born** Rayy (near Tehran, Iran), 903

**Died** 986

Şūfī spent his life as an astronomer in Iran, in close relation to the regional rulers of the Buyid dynasty. The most important of his several astronomical and other works was the *Book on the Constellations* (circa 964). In it he gave a description of the 48 Ptolemaic constellations, based on the Arabic translations of **Ptolemy's** *Almagest*, with detailed critique for each of the 1,025 stars in Ptolemy's star catalog, based on his own observations. Two drawings of each constellation were added, one "as seen in the sky," and one "as seen on the (celestial) globe."

The book became very influential both in the Orient and in Europe. Its text and nomenclature were taken up by many later authors, such as the encyclopedist Qazwīnī (died: 1283) and the Timurid Prince and astronomer **Ulugh Beg** in the star catalog of his astronomical handbook (epoch: 1437). For centuries, Arabic-Islamic astronomers followed the forms of the constellation figures as drawn in Şūfī's book, in written works and on instruments (celestial globes).

In Europe, Şūfī's book was not among the many scientific Arabic works that were translated into Latin between the late 10th and the 13th centuries. Nevertheless, its contents became known there and exerted considerable influence in several instances. King **Alfonso X** of Castile (reigned: 1252–1284) had a free recension of the book, with constellation drawings, included in his multivolume astronomical handbook, *Libros del saber de astronomia*; an Italian translation of this appeared in 1341. Perhaps also in the 13th century, a text corpus was compiled in Sicily, where drawings of the 48 constellations from Şūfī's book were combined with Ptolemy's star catalog (in the Latin translation of **Gerard of Cremona** from the Arabic) and extracts from some other astronomical and astrological texts (the so called Şūfī Latinus corpus, of which eight manuscripts are known today). In 1515, two maps of the Northern and Southern Celestial Hemispheres were printed in Nuremberg after woodcuts made by **Albrecht Dürer**. One of four portraits of important astronomers added by Dürer to the map of the Northern Hemisphere is an imaginary portrait of Şūfī (here called Azophi, with a medieval Latin spelling). In the 1530s, the German astronomer **Peter Apian** somehow made use of Şūfī's book, mentioned some old Arabic asterisms, and even converted them into drawn constellation figures on a star map. Şūfī's stellar nomenclature - in Arabic script - was also used on a celestial globe by J. A. Colom (circa 1635) and on the "King's globe" (1681–1683) by V. Coronelli. In 1665, Thomas Hyde published in Oxford an edition of **Ulugh Beg's** star catalog; in the accompanying commentary he amply quoted from Şūfī's book. From here, **Giuseppe Piazzi** picked up around 100 Arabic star names, which he added to the 1814 edition of

his Palermo star catalog, thereby introducing them into modern astronomy. Şūfi's name (in its medieval Latinized form, Azophi) was given by **Giovanni Riccioli** (1651) to one of the craters on the Moon.

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