« Anthyphairetic Ratio Theory in Medieval Islamic Mathematics », in : Yvonne Dold-Samplonius, Joseph W. Dauben, Menso Folkerts & Benno van Dalen, édés., *From China to Paris. 2000 Years Transmission of Mathematical Ideas. Series: Boethius 46*, Stuttgart (Steiner), 2002, pp. 187-202.

Édition électroniqueURL : <http://journals.openedition.org/abstractairanica/4993>

DOI : 10.4000/abstractairanica.4993

ISSN : 1961-960X

Éditeur :

CNRS (UMR 7528 Mondes iraniens et indiens), Éditions de l'IFRI

Édition imprimée

Date de publication : 15 mai 2004

ISSN : 0240-8910

Référence électronique

« « Anthyphairetic Ratio Theory in Medieval Islamic Mathematics », in : Yvonne Dold-Samplonius, Joseph W. Dauben, Menso Folkerts & Benno van Dalen, édés., *From China to Paris. 2000 Years Transmission of Mathematical Ideas. Series: Boethius 46*, Stuttgart (Steiner), 2002, pp. 187-202. », *Abstracta Iranica* [En ligne], Volume 25 | 2004, document 271, mis en ligne le 15 mars 2006, consulté le 25 septembre 2020. URL : <http://journals.openedition.org/abstractairanica/4993> ; DOI : <https://doi.org/10.4000/abstractairanica.4993>

Ce document a été généré automatiquement le 25 septembre 2020.

Tous droits réservés

« Anthyphairetic Ratio Theory in Medieval Islamic Mathematics », in : Yvonne Dold-Samplonius, Joseph W. Dauben, Menso Folkerts & Benno van Dalen, éds., *From China to Paris. 2000 Years Transmission of Mathematical Ideas. Series: Boethius* 46, Stuttgart (Steiner), 2002, pp. 187-202.

- 1 One of the most difficult parts of Euclid's "Elements" concerns the theory of ratios and proportions of general magnitudes in Book V. The author discusses in detail the treatises by three early Muslim scholars on an alternative definition of ratios, namely anthyphairetic ratio theory. The earliest and most important of these is by the highly capable 9th-century Iranian mathematician and astronomer al-Māhānī. The other two treatises, by al-Nayrīzī (ca. 880) in his commentary on the "Elements" and by 'Umar al-Ḥayyām (1048-1131) are less advanced and make clear that there was no tradition in Islamic mathematics of studying anthyphairetic ratios. The article is very technical and includes all definitions of anthyphairetic ratios given in the three treatises.

INDEX

Thèmes : 10. Histoire des Sciences et des Techniques

nompropre Khayyam, Euclid