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### Claudii Ptolemaei opera quae exstant omnia

Best known for his 1906 discovery of lost texts in the Archimedes Palimpsest, Danish scholar Johan Ludvig Heiberg (1854–1928), professor of classical philology at Copenhagen, published numerous editions of ancient mathematicians, including Archimedes and Apollonius of Perga (also reissued in this series). Between 1898 and 1907, he published in three parts the extant astronomical works of Ptolemy, active in second-century Alexandria. The Ptolemaic system, his geocentric model of the universe, prevailed in the Islamic world and in medieval Europe until the time of Copernicus. This second part of Volume 1, published in 1903, contains a brief Latin preface and the Greek text of Books 7-13 of Ptolemy's major astronomical treatise, known as the *Almagest*. It demonstrates how to use astronomical observations to construct cosmological models and includes tables that make it possible for celestial phenomena to be calculated for arbitrary dates.

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# Claudii Ptolemaei opera quae exstant omnia

VOLUME 1: Syntaxis mathematica Part 2: Libri VII–XIII

Edited by Johan Ludvig Heiberg





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### CLAUDII PTOLEMAEI OPERA QUAE EXSTANT OMNIA VOLUMEN L

## SYNTAXIS MATHEMATICA

EDIDIT

J. L. HEIBERG, PROFESSOR HAUNIENSIS.

PARS II LIBROS VII—XIII CONTINENS.

LIPSIAE IN AEDIBUS B. G. TEUBNERI. MDCCCCCIII.

LIPSIAE: TYPIS B. G. TEUBNERI.

### PRAEFATIO.

In hoc uolumine, quod sine mea culpa tardius prodit quam uolueram, nouum adcessit subsidium, maxime ubi D deficit,

G - cod. Uaticanus gr. 184 bombyc. s. XIII. praemittuntur 6 folia non numerata (Ir index recens, I' uacat, II index paulo uetustior, III<sup>r</sup> titulus antiquus: Ammonius in Porphyrium et alia eiusdem et aliorum 184 et manu etiam antiquiore: Claudii Ptolemei opus. III<sup>v</sup> uacat. IV fragmentum alius codicis eiusdem generis, inc. πίναξ ἀκριβής τῆς γραφῆς τοῦ βιβλίου. (Έ) ομοῦ ἰατροῦ μαθηματικά, des. τυχών σώζεται η ἀπο-Ονήσκει. V—VI index Uaticanus). continet f. 1—8<sup>r</sup> ύπόθεσις τοῦ ἀστοολάβου καὶ κατ' Ἰνδοὺς ψηφηφορία ἡ λεγομένη μεγάλη (inc. εί βούλει γινώσκειν την του άστρολάβου μέθοδον, fol. 2' και ταῦτα μὲν περί τῆς μεθόδου τοῦ ἀστρολάβου: — ψηφηφορία κατ' Ἰνδοὺς ἡ λεγομένη μεγάλη. είπωμεν δε και περί των, des. ου την πλευραν έζήτεις εδοείν), f.  $8^{r}$ — $8^{v}$  ψηφηφορία ήλίου, ψ. ((, ψ. τῶν  $\bar{\epsilon}$  πλανωμένων, f. 9 (alia manu alioque atramento) ύπόδειγμα τὰ ἀπ' ἀρχῆς Αὐγούστου, des. fol. 9° ψηφηφορίας ένθαδι τέρμα φίλος, f. 9<sup>v</sup> scholia aliquot et tabulam computatoriam, f. 10-24 introductionem in Ptolemaeum, f. 25-80 Θέωνος Άλεξανδρέως σχόλια πάνυ χρήσιμα είς την μεγάλην σύνταξιν Πτολεμαίου, f. 80<sup>v</sup>-81<sup>r</sup> scholia in Ptolemaeum alia manu, f. 81<sup>v</sup> epigramma in Ptolemaeum, f. 82-220 Ptolemaei Syntaxin usque ad II p. 589, 7 ἀνωμαλίας.

a\*

IV

#### PRAEFATIO

praeterea in extrema parte libri XIII contuli

H — cod. Marcian. gr. 303 bombyc. s. XIV et chartac.
s. XV, de quo u. Morellii Bibliotheca manuscr. p. 179 sq.,
et in tabula p. 606-7

K --- cod. Uatican. gr. 1291 membr. s. IX fol. 89, de quo u. Franciscus Boll, Sitzungsberichte der philos.philol. und der histor. Classe der k. bayer. Akademie der Wissenschaften 1899 p. 110 sq.

Prolegomena critica de codicum ratione et de codicibus in adparatu non usurpatis, quorum materiem collectam habeo totam, indicemque nominum, ne moles huius uoluminis immodica fieret, tertio seposui, quod scripta astronomica minora continebit.

In adparatu ad p. 414, 1 pro nomine Halmae substituendum ed. Basil.; in parte priore descriptio in fine adiecta ponenda erat post p. 544.

Ser. Hauniae Kal. Iul. MDCCCCII.

### J. L. Heiberg.