

Bergamo

Biblioteca Civica Angelo Mai

Ms MA 388 (formerly cod Σ II 2 and cod 1177)

Astronomical compendium with a *Tabulae Alfonsinae* and an *Almanach planetarum*

North Italian (Bergamo?)

second half 15th century (after 1466)

contents

The manuscript has four separate sections, which were compiled from different sources, probably soon after the individual sections were written. Descriptions appear in McGURK 1966, IV, pp. 3-9 and BLUME/HAFFNER METZGER 2016.

I

ff. 1r-48r Johannes de Saxonia, *Super Alkabitii introductorium ad iudicia*
(THORNDIKE/KIBRE 1963, col. 1699, no. 4).

inc.: *Vir sapiens dominibatur astris...*

expl.: *explicit scriptus super alkabitum introductorium ad iudicis
astronomicorum ordinatum parisius (?) per dominum Albertum de
Saxonia anno domini 1331.*

ff. 48v-49r *Prologue in Almagestum* (THORNDIKE/KIBRE 1963, col. 1245, no. 14),
which provides a biography of Ptolemy.

inc.: *Quidem princeps nomine Albugnase in libro suo ...*

expl.: *vero non dulcescunt.*

ff. 49r-v Arnaldus de Villanova, *Parabolae (excerpta = De morborum curationibus*
cf. THORNDIKE/KIBRE 1963, col. 460, no. 6). On the treatment of
illnesses according to astrological aspects.

inc.: *Doctrina primo de praeparantibus omnium ad utiliter operandum Magistri Arnaldi de Villa Nova. Omnes medela procedit a summo bono ...*

expl.: *Doctrina primo in parabolas optimas. Expliciunt meditationes parabole seu canones generales curationes morborum a magistro Arnaldo de Villa Nova. Deo gracias amen.*

ff. 50r-58v Albertus Magnus, *Speculum Astrologiae* (THORNDIKE/KIBRE 1963, col. 975, no. 10; ed. BORGNET 1891, pp. 629-650). With marginal glosses.

inc.: *Speculum Alberti Magni ordinis praedicatorum de modo studendi in Astrologia. Occasione quorundam librarum apud quos...*

expl.: *ab eodem causate. Explicit speculum Alberci in astrologia de gracias.*

ff. 59r-60r *Commentum in Centiloquium*. Commentary on the ps-Ptolemaic *Centiloquium*. Attrib. Ali b. Ridwan (?), see CARMODY 1956, p. 16.

inc.: *[A]liarum [...] Quesivisti ut hanc propositionem 60 am centilogii cum commento ...*

expl.: *et quod continetur in exposition commenti Halion.*

ff. 60v-68v *Tractatus de natura Christi*.

inc.: *[P]rimo suppono cum sacribus doctoribus...*

expl.: *heretice mundi fiunt et abstergent amen amen. deo gracias.*

ff. 69r-v blank

II

ff. 70r-75v *Theorica Planetarum Gerardi* (ed. CARMODY 1942). With a few drawings in the text.

inc.: *Incipit Theorica Planetarum secundum Magistrum Johannem de Sacrobosco de circulo et motu solis. Circulus eccentricus dicitur vel egressus...*

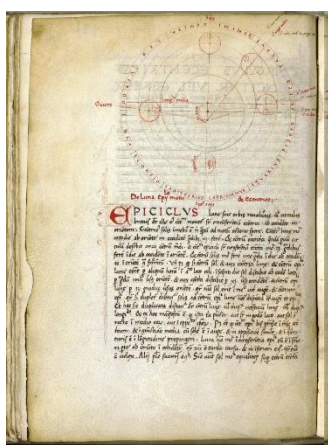
expl.: *ipsi planete e non corporaliter. Finis.*

- ff. 76r-90r *De astrolabio et quadrante*. Compilation after Johannes Hispaliensis (?), *De constructione Astrolabii* (THORNDIKE/KIBRE 1963, col. 156, no. 4 and 9); with excerpts from Robertus Anglicus and Campanus de Navarra (ff. 86v-89r, cf. THORNDIKE/KIBRE 1963, col. 1405, no. 11). A series of varied text sections on the construction and use of astrolabe and quadrant. For a detailed description, see MCGURK 1966, IV, pp. 4-6).
- fol. 90v blank
- III
- ff. 91r-112v *Tabulae stellarum fixarum*. Star tables of the *Tabulae Alfonsinae* with partly slightly different coordinates (cf. McGurk 1966, p. 6). The beginning is lost (loss of leaf).
- inc: *illa que est super extremitatem caude*. 2 [Polar Star].
- ff. 113r-122r *Almanach planetarum*. Saturn to Luna. The moon table on fol. 121v provides information on elections (choice of time for various activities, e.g. . *B. Venatio in terra; Principes videre...*).
- fol. 122r *Tabula mansionum Lunae*. Table of the lunar stations. The section is dated: ...*facta ad gradum zodiaci primi mobilis anno salutis 1466 mccccxvi*.
- fol. 122v Johannes de London, *Tabula stellarum*, with astrolabe stars (KUNITZSCH 1966, Type VI).
- fol. 123r *Tabula stellarum*. Table of the astrolabe stars based on the Toledan tables (KUNITZSCH 1966, Type XIII).

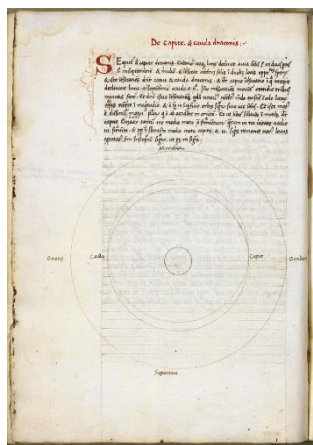
- ff. 123v-124r Rotae. Circular diagrams of the signs of the zodiac, months, climates, temperaments and aspects.
- fol. 124v blank
- ff. 125r-130v *Tabula arcus diei et nocti totius anni*. Tables of numbers for the length of the day and night, from March 1st to February 28th
- IV
- ff. 131r -132r ps.-Albertus Magnus, *De causis somniorum*. On the significance of dreams for future predictions, etc.
- inc.: Incipit foeliciter tractatus Domini Alberti Magni de causis sompniorum. In sompniiis ymgaina praeparet ...
- expl.: *significationem futuri*.
- ff. 132r-133r Thebit ben Corat, *De quantitatibus stellarum* (ed. CARMODY 1960, pp. 145-148; THORNDIKE/KIBRE 1963, col. 1147, no. 7). On the dimensions and distances of the celestial spheres from each other and from the earth.
- inc.: *Incipit Thebith de quantitaibus stellarum. Ptolomeus et aliis sapientes...*
- expl.: *quia quiddam modicum remansit*.
- ff. 133r-v *Nota quod orientalis*
- ff. 133v-135r Campanus de Navarra, *Theorica planetarum (excerpta)*. On the dimensions of the heavenly bodies
- inc: *De magnitudine corporum celestium secundum Campanum in sua theorica in capitulo de equationibus singulorum planetarum per miliaria...*

- fol. 135r Symbols of the signs of the zodiac
- inc.: *Ibidem vero secundum Ptolomeum 29 12 44 3 0 0 00.*
- fol. 135r Johannes de Lineriis, *Canones (excerpta)*. A later addition.
- ff. 135v-138r *Longitudines et latitudines civitatum*. Geographical information on many cities, partly with information on the difference relative to Toledo. The focus is on northern Italy between Rome and Milan, several subsequent lists have similar contents.
- fol. 136v *De coloribus ecclipsium*. Colour information on solar and lunar eclipses depending on longitude and latitude.
- ff. 137v-138r Table with the assignment of cities to each sign of the zodiac.
- ff. 138v-139v *Notae astrologicae*.
- Horoscope (*Questio de vita alicuius absentis*).
- On the effect of the planets in the signs of the zodiac (*potestates planetarum in signis*). With a table.
- On the effect of the planets in the houses of the horoscope (*potestates planetarum in domibus*). With a diagram.
- A note has been added on fol. 138v: *introitus solis in ariete diebus equatis 1478 in principio anni secundum computationem Magistri Georgii de Russia ad meridianum Bonensis (?) ab occasu.*
- ff. 140r-v blank
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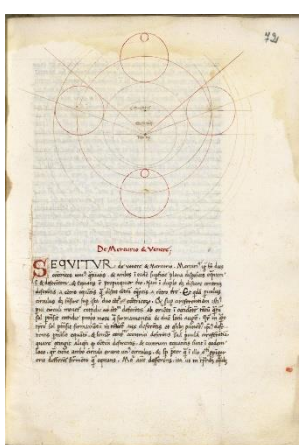
illustrations



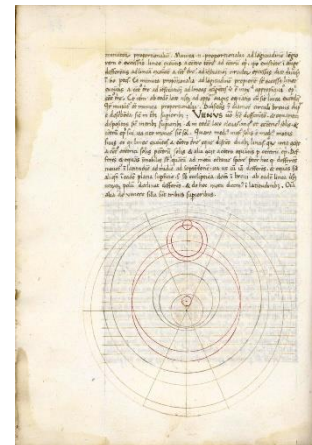
fol. 70v



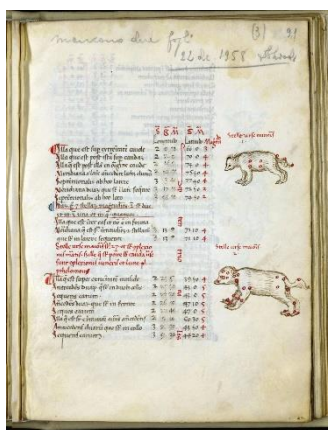
fol. 71v



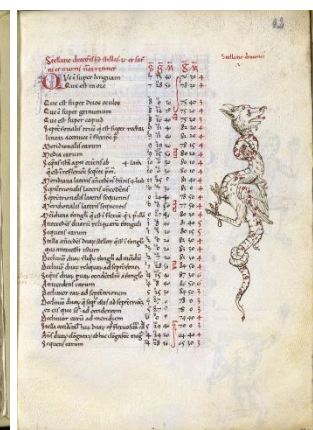
fol. 72r



fol. 72v



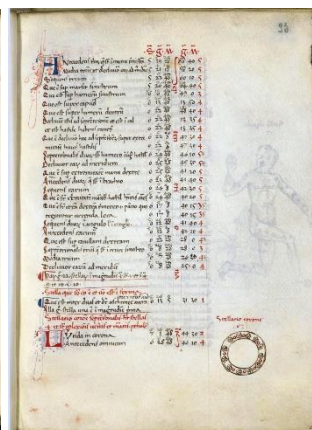
fol. 91r



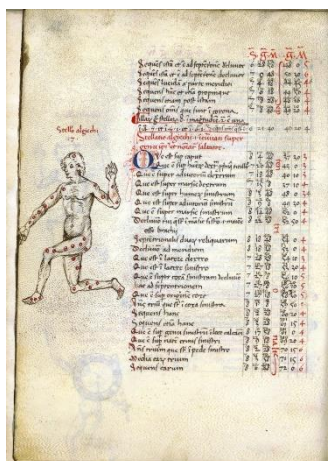
fol. 92r



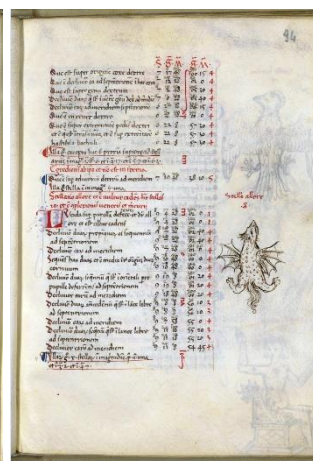
fol. 92v



fol. 93r



fol. 93v



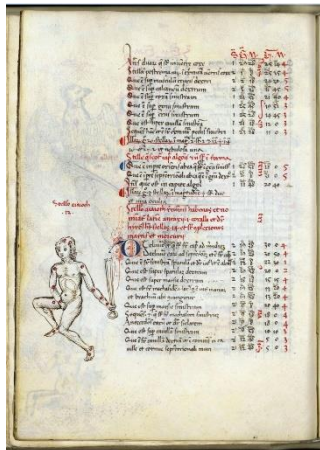
fol. 94r



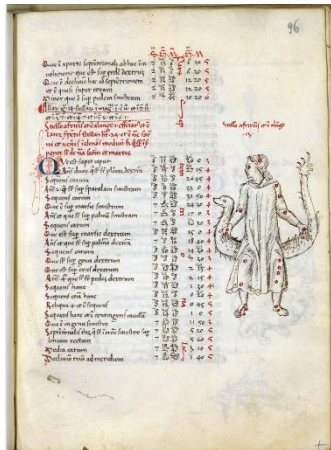
fol. 94v



fol. 95r



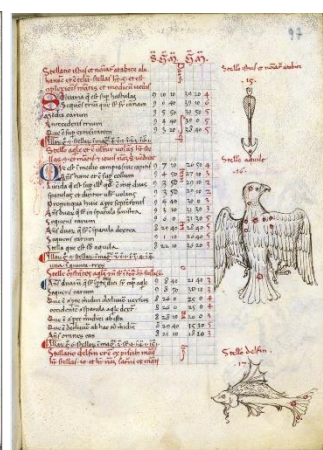
fol. 95v



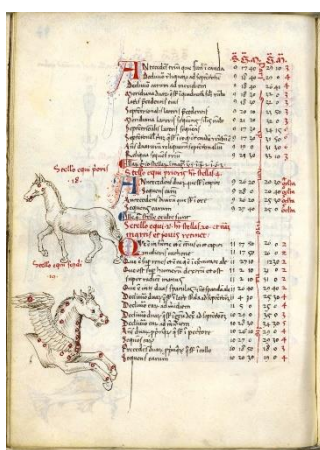
fol. 96r



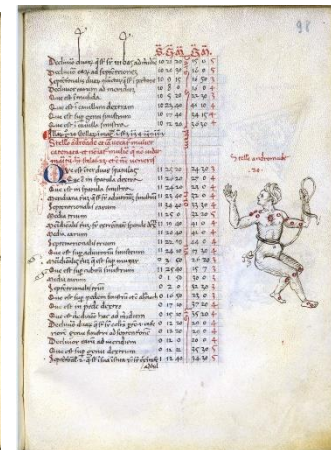
fol. 96v



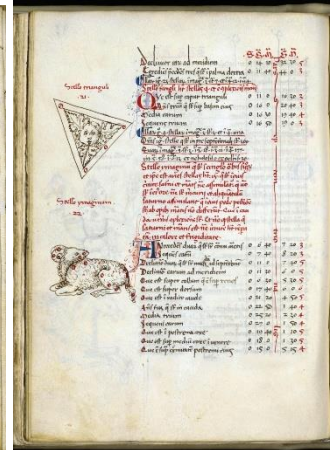
fol. 97r



fol. 97v



fol. 98r



fol. 98v



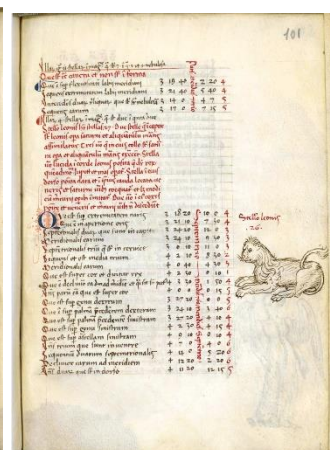
fol. 99r



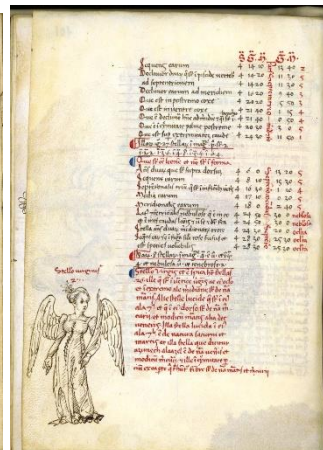
fol. 100r



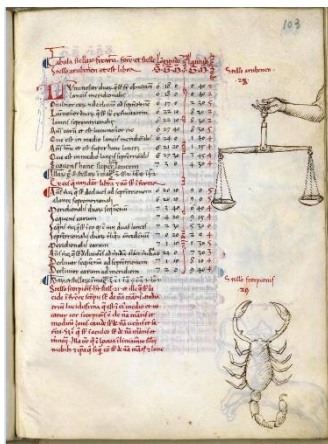
fol. 100v



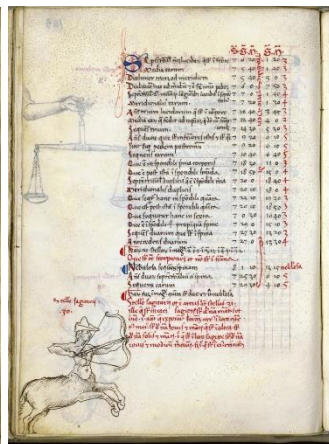
fol. 101r



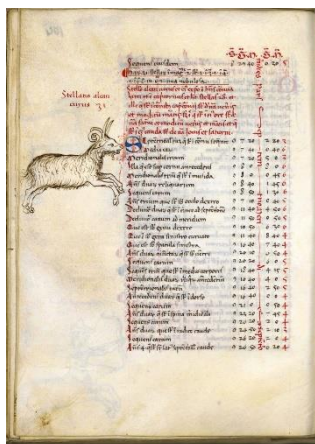
fol. 101v



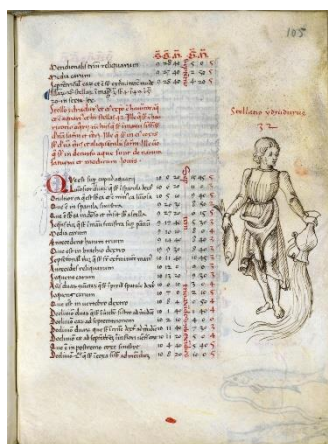
fol. 103r



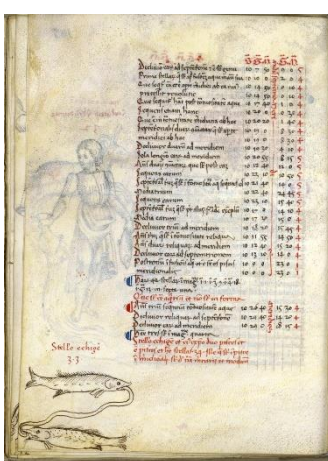
fol. 103v



fol. 104v



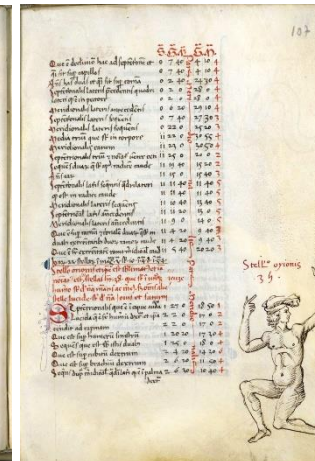
fol. 105r



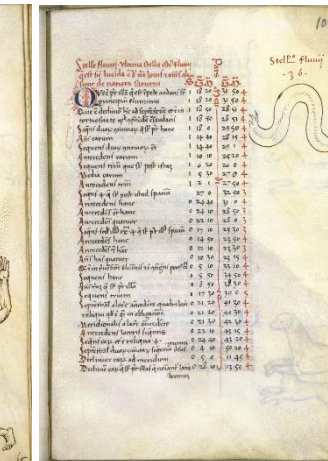
fol. 105v



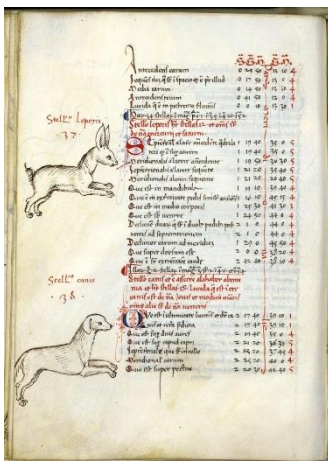
fol. 106v



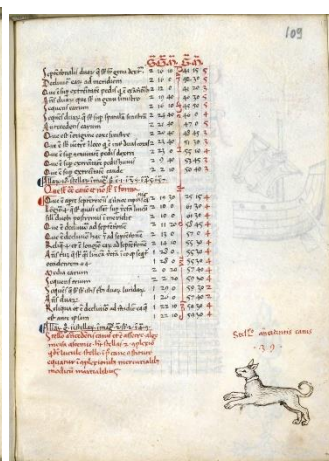
fol. 107r



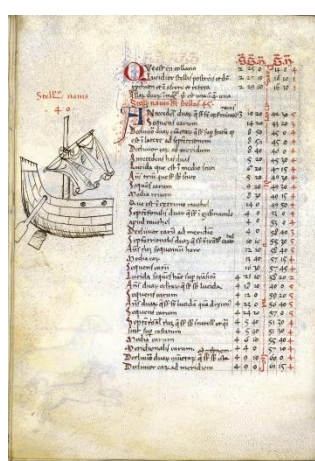
fol. 108r



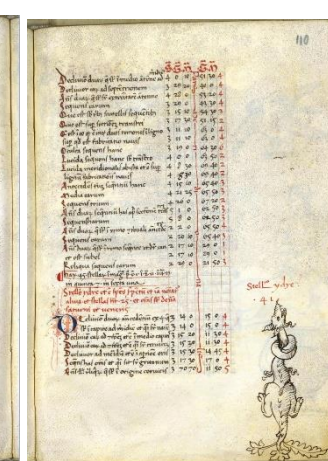
fol. 108v



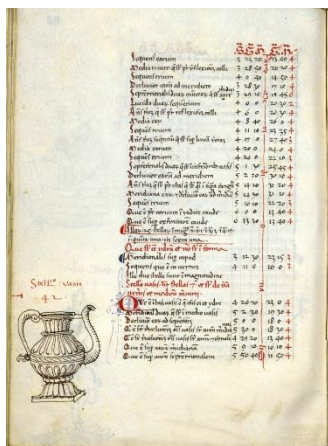
fol. 109r



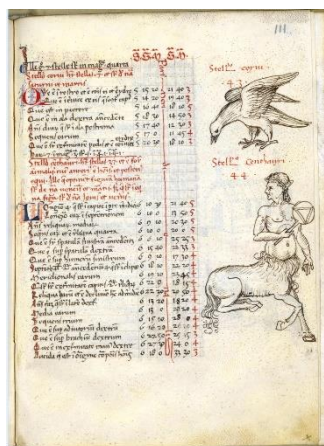
fol. 109v



fol. 110r



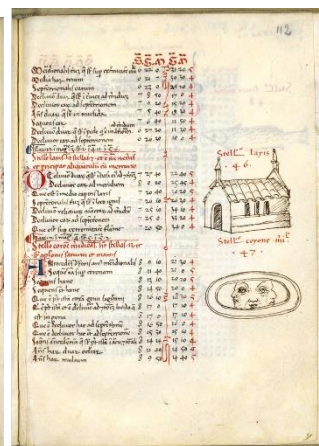
fol. 110v



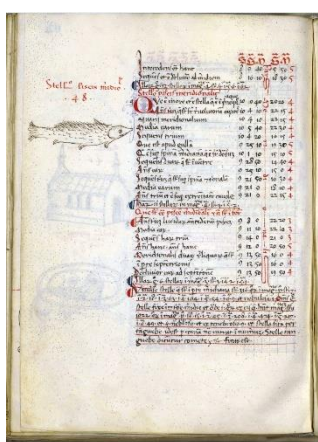
fol. 111r



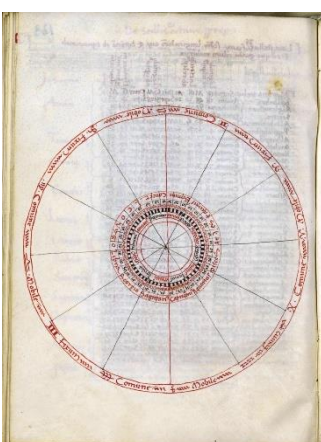
fol. 111v



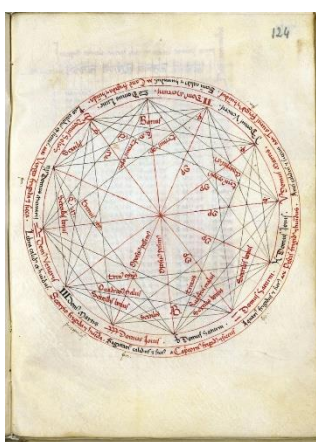
fol. 112r



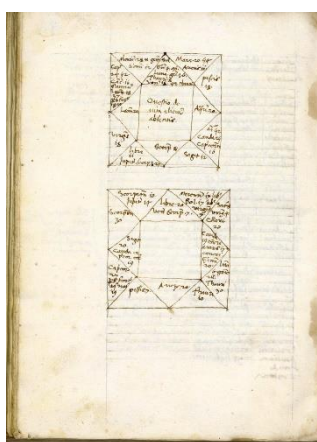
fol. 112v



fol. 123v



fol. 124r



fol. 138v

ff. 70v- 72v

Diagrams illustrating the *Theorica Planetarum Gerardi*.

ff. 91r-112v

Very fine pen drawings of the 48 Ptolemaic constellations, with some variant iconographies also offered. The stars are rather inexpertly marked (*i.e.*: according to the text and not astronomically accurate) by small red circles from Ursa Maior to Taurus. All the human figures are nude. The headers for each table sometimes contain variant names for the constellations, as well as the planetary associations for each constellation and for some of the brighter stars.

fol. 91r

URSA MINOR (labelled: *stelle urse minoris*) is a small bear with a pointed snout and wavy tail, standing to the left. The figure is marked by stars.

URSA MAIOR (labelled: *stelle urse maioris*) is a larger bear jumping to the left, with the same wavy Tail as Ursa Minor. The figure is marked by stars.

fol. 92r

DRACO (labelled: *stelle draconis*) is a dragon with bird's wings and bird's legs, and a long, snaky body. It is placed vertically on the page and turns its head to

the right. There is a knot in the neck and a knot in the long tail. The figure is marked by stars.

fol. 92v CEPHEUS (labelled: *stelle inflamati*; the header reads: *Stellatio inflamati seu thechei...*) is a nude youth, half-kneeling slightly to the left. He has a filet on his head. He raises both his arms, with the arms bent and the palms facing the viewer. The figure is marked by stars.

BOOTES (labelled: *stellatio tegnij dicitur ululans*; the header reads: *stellatio tegnij aut ululantis, vel vociferantis seu cephei*) is an older, bearded, nude male figure striding to the left, with his right leg leading. He raises his right arm vertically above his head and holds a club in his left hand down to the side. The figure is marked by stars.

fol. 93r CORONA BOREALIS (labelled: *Stellatio corone*; the header reads: *stellatio corone septentrionalis*) is a circular ring decorated with simple flowers, seen from the top. The figure is marked by stars.

fol. 93v HERCULES (labelled: *stellatio algiechi*; the header reads: *Stellatio algiechi id est incurvati super genu ipsius et nominatur saltator*) is a nude, beardless man, who walks to the left with his left leg leading. He extends his right arm in front of him and raises his left hand, elbow bent, as if in salutation. The figure is marked by stars.

fol. 94r LYRA (header: *Stellatio allore et est vultur cadens*), is a odd batlike creature with a dog's head, two wings, a scaly toadlike body, and a long horse's tail. No stars are marked.

fol. 94v CYGNUS (header: *stellatio heresim et est volans et vocatur galina et dicitur herisum quasi redolens ut lilium habireo*) is a heraldic chicken, with its head turned to the right and spread-out wings. The figure is marked by stars.

CASSIOPEIA (header: *stellatio cassiope habentis delibutam id est maritum (?) ablutam*) is nude and sits sideways to the left on a low-backed throne. Her upper body is twisted towards the viewer and her arms extended, bent upwards at the elbow. She wears a wimple on her head. The figure is marked by stars.

fol. 95r PERSEUS (header: *stellatio celcubellus anecleb cuius nomen in latino est perseus et est deferens caput algol*) is nude, faces the viewer and stands slightly to the

left with his left leg raised. He holds a female head in his lowered right hand and a straight sword above his head with his left hand. The figure is marked by stars.

- Fol. 95v AURIGA (header: *stellatio aiaioth retinentis habenas et nominatur in latine antaxii id est coralli et dicitur hircus*) is a nude youth, seated to the left. He grasps his genitals with his right hand. In his left hand he holds a type of pincers (like fire tongs). The figure is marked by stars.
- Fol. 96r OPHIUCHUS (header: *stellatio africius et est alange id est effeminatus et est lator serpentis*; label: *stellatio afrireius et est alange*) is a male figure standing facing the viewer with his knees slightly bent. He wears a long loose robe and holds his hands out to the side with his palms forward. He turns his head to the left. The SERPENS is U-shaped with a thick body and faces to the left. It does not appear to be held by the man. The man is marked with stars, but there are no stars in the Snake.
- fol. 96v SERPENS (header: *stellatio serpentis alange*) is depicted twice. 1) is a long snake with a dragon's head, a twist in its body and an acanthus-like end to its tail. There are three stars marked in the head. 2) is a two-legged wyvern that stands to the left, but turns his head to the right. It has wings and a twist in its upright tail. No stars are marked.
- fol. 97r SAGITTA (header: *stellatio istus et nominatur arabice ala haname et est telum*; label: *stellatio istus et nominatur arabice (!)*) is a short arrow pointing downwards. The figure is marked by stars.
- AQUILA (header: *stellatio aquile et est vultur volans*) is a spread-out eagle, with its back to the viewer and its head turned to the right. The figure is marked by stars.
- DELPHINUS (header: *stellatio delfin et est ex piacibus marinus*) is a fantastic-looking fish with a mouse's face with a beard and a quiff, and a very large dorsal fin on its humped back. It swims to the left. The figure is marked by stars.
- fol. 97v EQUULEUS (*stellatio equi prioris*) is a full horse striding to the left, with its right foreleg raised. The head is marked by 4 stars.

- PEGASUS (*stellatio equi secundi*) is the front half of a winged horse, with a slightly curved cut-off. Its front legs are extended and it faces to the right. The wings are raised and the figure is marked by stars.
- fol. 98r ANDROMEDA (header: *stellatio andromade et iam vocatur mulier catenata et nominatur mulier que non vidit maritum*) is a nude male figure seated to the right, but with his upper torso turned back to the left. He looks upwards to the left. He has a turban on his head. Both arms are raised, bent at the elbow. In the left hand, he holds the end of a rope that is also wound around his waist. The figure is marked by stars.
- fol. 98v TRIANGULUM (*stellatio trianguli*), is an equilateral triangle with putto's head and leaves inside. It is marked by 4 stars.
- ARIES (label: *stellatio ymaginum (!)*) is a ram that reclines to the left, but turns its head back to the right. It has curled horns and a long tail. The figure is marked by stars.
- fol. 99r TAURUS (*stellatio tauri/thauri*), is half of a bull facing to the left. Its front legs are curled under and it has lyre-shaped horns. The figure is marked by stars.
- fol. 100r GEMINI (*stellatio geminorum et sunt alionze*) are a nude couple standing close together and facing the viewer, though standing slightly to the left. The man puts his arm around his partner's shoulders and raised his right hand in salute. She holds him around his waist and partially covers her private parts with some vegetation. No stars are marked.
- fol. 100v CANCER (*stellatio Cancri*) is a crafish that faces to the right. No stars are marked.
- fol. 101r LEO (*stellatio leonis*) reclines to the left and his tail is wrapped between his hind legs. No stars are marked.
- fol. 101v VIRGO (header: *stellatio viriginis et est spica*) is a female figure dressed in a long gown with a rectangular neck opening, standing and facing the viewer, slightly turned to the left, with her head turned to the right. She has long wings which are partially opened. She holds her right hand, palm forward, down by her side. In her left hand, she holds a palm frond. No stars are marked.

- fol. 103r LIBRA (header: *stellatio arubenem et est libra*) is a beam balance held by the little pinkie of a disembodied arm. No stars are marked.
- SCORPIO (*stellatio scorpionis*) is a naturalistic scorpion seen from the top, with its head towards the top of the page. No stars are marked.
- fol. 103v SAGITTARIUS (header: *stellatio sagitarii et est arcus*) is a centaur that leaps to the right. His human half is nude, save for a hunter's hat, he pulls the string of his bow with his right hand. No stars are marked.
- fol. 104v CAPRICORN (header: *stellatio alcancurus et eius expositio est habens cornua hirci et est capricornus*) is a ram, leaping to the right. It has two sets of horns: one straight and one curved. No stars are marked.
- fol. 105r AQUARIUS (header: *stellatio ydrudurus et eius expositio est hauritor aquae et est aquarius*) is a young man facing the viewer, turned slightly to the left with his head turned to the right; he is dressed in a long, belted tunic. He holds a fish in his right hand and the base of an urn in his left hand, from which water pours under his feet. No stars are marked.
- fol. 105v PISCES (header: *stellatio echigen et eius expositio duo pisces et est piscis*) are two pike-like fish, set horizontally in opposite directions. Their mouths are connected by a stream and no stars are marked.
- fol. 106v CETUS (*stellatio ceti animal maris*; label: *stellatio formarum (!)*) is a large fish turned vertically in side view, with its dog-like head facing the top of the page. No stars are marked.
- fol. 107r ORION (header: *stellatio Orionis et iam est sublimatus et iam nominatus est (!)*) is a nude male that kneels/crouches to the left, but turns his head to the right. He raises both his arms above his head and points with his right index finger. He wears loose cap/unfurled turban on his head. No stars are marked.
- fol. 108r ERIDANUS (*stellatio fluvii*) is a stylised segment of a river. No stars are marked.
- fol. 108v LEPUS (*stellatio leporis*) is a hare jumping to the right, with upright ears. No stars are marked.

- CANIS MAIOR (header: *stellatio canis et est ascere alahabor abemenia*) is a hound with long, floppy ears leaping to the right. No stars are marked.
- fol. 109r CANIS MINOR (header: *stellatio antecedentis canis et est asscere algemeisa*) is a small, sharp-nosed dog, with pointed ears. It leaps to the left. It has a collar. No stars are marked.
- fol. 109v NAVIS (*stellatio navis*) is the stern half of a wooden ship, with two steering oars and a lopsided square sail on its mast. No stars are marked.
- fol. 110r HYDRA (header: *stellatio ydre et est serpens serpentum et iam nominatur aliua*) is a dragon seen from the back, with his head towards the top of the page. He has a knot in his long neck and two hind legs. The tail ends in vegetal foliage with three branches. No stars are marked.
- fol. 110v CRATER (*stellatio vasis*) is a fluted handled jug with square base plate. No stars are marked.
- fol. 111r CORVUS (*stellatio corvi*) is a crow that stands to the left with its wings slightly raised and pecks at the ground. No stars are marked.
- CENTAURUS (*stellatio centhauri*) is a centaur facing right with his head turned back in profile to the left. The equine half has crouching hind legs and standing front legs, with the right front leg slightly bent. His human half is nude and he wears a fillet on his head. He holds a round paddle with a triangle on it in his right hand. No stars are marked.
- fol. 111v LUPUS (*stellatio lupi*), is a wolf that reclines to the right. No stars are marked.
- fol. 112r ARA (*stellatio laris*) is a small, free-standing chapel with small towers and each end. No stars are marked.
- CORONA MERIDIONALIS (*stellatio corone meridionalis*) is an oval rig, with a tripartite face set within it.
- fol. 112v PISCIS AUSTRINUS (*stellatio piscis meridionalis*) is a fish with a pointed nose, swimming to the right.

- ff. 123v-124r Two circular diagrams showing the division into signs, decans facies, etc, and showing the aspects
- fol. 138v Two horoscopic charts.

notes

22.0 x 15.8 cm, 140 folia, by several hands. In the first seven layers and the last, the outer and inner double sheets are parchment, the rest is paper, ff. 91-130 are made entirely of parchment.

The pictorial tradition is nearly identical to BAV, Vat. lat. 3099, and a descendant of the tradition seen in the Oxford, Rawl C 117 and Vatican BAV Urb. lat 1399, as well as the Prosdocimo de'Beldomandi ms, and Oxford, Can class misc 554. The earliest part of the ms can be dated according to the table of the lunar stations to 1466; the information in most of the sections is predominantly astrological.

Note the number of small errors in the transcription of names into the labels and the rather haphazard placement of the stars within the figures.

The manuscript is first recorded in the 15th century in the Dominican convent in Bergamo (fol. 64v: *Est conventus Sancti Dominichi de Bergamo ordinis fratrum predicatorum*).

bibliography

LUPO 1799, p. 455.

McGURK 1966, IV, pp. xiv, xxii, xxvii, 3-9.

LIPPINCOTT 1985, p. 68 and *passim*. North Italian, 2nd half 15th c.

ŚNIEŻYNSKA-STOLOT 1994, p. 65.

BLUME/HAFFNER/METZGER 2016, II, 1, pp. 73-75, 453-58 and figs. 511-13.

This ms has been fully digitised at: <https://www.bdl.servizirl.it/vufind/Record/BDL-OGGETTO-4227>