Sarah Glaz

Ptolemy's Almagest: Book I

a found poem

Only mathematics can make men see clearly, from the constancy, order, symmetry and calm associated with the divine

that the heavens move like a sphere, that the earth, too, taken as a whole, is sensibly spherical, that the earth is in the middle of the heavens, that the earth has the ratio of a point to the heavens, that the earth does not have any motion from place to place, either. that there are two different primary motions in the heavens.

Only mathematics can provide sure and unshakeable knowledge to its devotees, provided one approaches it rigorously,

> on individual concepts on the size of chords, on the table of cords, on the arc between the solstices, on spherical proofs, on the arcs between the equator and the ecliptic, on the table of inclination, on rising-times at *sphaera recta*.

This science makes its followers lovers of divine beauty, accustoming them and reforming their natures, to a similar spiritual state.

Note:

Claudius Ptolemy (ca. 100 – 170 CE) was a Greek mathematician, astronomer, astrologer, geographer, music theorist, and philosopher, who lived and worked in Alexandria, Egypt. His great treatise in astronomy, known as *Almagest* (originally entitled *Syntaxis Mathematica*), advocated the prevailing geocentric model of the universe, viewing the earth as the fixed and immovable center around which the planets rotate in concentric circles. *Almagest* became the supreme authority on astronomy till Copernicus work appeared (1543 CE), and its theory of planetary orbits was not abandoned and resolved till Kepler observed that planets' orbits are elliptical, rather than circular (1600 CE). In spite of its errors, *Almagest* set astronomy on solid mathematical basis, which included the development of many mathematical tools, particularly trigonometry (cords were precursors of sine functions), used to these days by both astronomers and mathematicians.

This found poem is formed from the introduction and table of contents of *Almagest: Book I*, translated into English by G. J. Toomer, Duckworth & Co., 1984.

