

## **On the Unchangeability of the Paths of the Planets**

having performed numerous measurements  
Aristyllus and Timocharis of Alexandria  
found that some stars keep the same distance  
from each other  
as if they were pinned to specific places  
on a solid sphere rotating above us

in Leo two eastern stars and the stars of Hydra  
lie on one straight line  
in Cancer a star from the southern claw  
remains in the southern claw on a straight line with the other stars

later Hipparchus of Nicaea checked their imperfect data  
and reaffirmed their generally fair conclusions

in Virgo there are two stars between the northern leg of Virgo and  
the right leg of Boötes  
the southern star is of the same brightness with the one on the foot of Boötes  
the northern one shines weakly on the same straight line with its feet  
and between Spica and the second from the end tail star of Hydra  
there are three stars on the same silent straight line

Claudius Ptolemy gathered even more data  
his measurements confirmed  
the conclusions made by Hipparchus of Nicaea

for Pisces a star in the mouth of southern Pisces  
and a bright one on the shoulders of Horse and a bright one on his chest  
all lie on the same straight line

the fixed stars keep the same distances from one to another  
the sphere rotates in the east direction of the Zodiac  
keeping the positions of celestial objects more certain  
than an iron rail nailed to a dome

up to our time in their combinations  
there is no altering  
so if someone wishes to check these configurations again  
relating to the celestial globe  
they will find it is now approximately as before  
as measured by Hipparchus

fixed stars always keep  
their positions in relation to one another  
creating invariable figures of rotations on a solid space sphere

configurations comprehended by Ptolemy  
who confirmed the observations of Hipparchus  
who confirmed those of Aristyllus and Timocharis  
are still the same  
anyone who would like for the sake of adherence to the truth  
to perform similar measurements  
correlating the distances between stars  
will see their positions are preserved

after the stars bleach die and crumble into immaterial dust  
they will gather together again from the motherly sprinkle  
into new ones with the same brightness mass size colour as before  
a click — and all heavenly objects will stand on the same rails  
they will move by unchangeable paths established in ancient times  
in the long-gone previous era  
measured by ancient sages Aristyllus and Timocharis  
Hipparchus of Nicaea  
and the greatest of them Ptolemy  
who proved the unchangeability of the paths of the planets  
our path across the stellar globe is destined

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*Author's Note:* The poem is in response to Ptolemy's *Almagest*, Chapter 1 of Book 7.