

## The Celestial Room

### The Idea

The brief for the *Celestial Room* was to create a mural of the stars and constellations for an indigo nursery room using the imagery on the ceiling of Grand Central Station in New York, painted in 1913. The station's mural depicts both the stars overhead, but also draws from the zodiac constellation artwork from Johann Bayer's 1603 *Uranometria*, the first star atlas to encompass both Northern and Southern hemispheres. Curiously, it was noted after it's opening that, most of the painting is flipped, possibly due to the projection technique used, mirroring the medieval tradition of drawing star atlases from a 'God's eye view' (from the outside looking in). After thirty years of smoke and a leaky roof, the mural had to be heavily restored, or rather, replaced and in 1944-5 a new version was painted onto cement and asbestos boards and bolted over the damaged mural. The aesthetic of these drawings changed, favouring clean, bold lines, more simplified than the original painting and closer to the engravings on which they are based. With this repainting, the Triangulum was also introduced into the design.

For the nursery room, it was decided that the stars would be painted as they were aligned at the time of the clients' wedding date and time. Although the stars would not have been visible at that moment due to the Sun, fortuitously they appear in the same positions at the opposite side of the year at night time, which is roughly the due date of the baby. The point in the room from which the stars line up correctly is in the centre of the room, 45 cm below the top of the dado rail, about the eye-height of a toddler just beginning to learn to walk, but frequently falling back and looking up at the sky.

### The Execution

Roberson's Antique Gold Liquid Metal paint was used, against a sky of Farrow and Ball's Stiffkey Blue. Due to the reflective nature of the metal paint, as the room is walked around different stars and parts of the drawings reveal themselves as the light catches them.

The azimuth degrees were marked around the room in chalk. From these the positions of the lines were worked out mathematically, measured, then drawn. The stars were projected using an open-source app called *Stellarium* and were lined up using the degrees with the markings around the room. They were then traced and painted with their size corresponding to their relative magnitudes. The constellations themselves have been freed from their places on the zodiac line and their stars and were positioned to relate to the use of the room, though they are still in the correct order. Aquarius runs into the room, his water flowing out of the door, watering the roses in William Morris' *Trellis* wallpaper on the landing walls just outside. The Ram, Aries, looks over to where the baby will sleep in the planned position of the cot, and the crab, Cancer, crawls towards the window, out of the room. Pegasus on the opposite wall leaps out from the black shadow beside the window, above the planned placement of the single bed. This reflects the darkness of deep sleep, from which vibrant, powerful dreams burst forth. Leaping over the door, he pulls the sleeper in his sleigh bed free from the time and space constraints of waking reality.

The smaller triangle of the pair, and the bee do not actually belong in the Northern Hemisphere, as they have been depicted in Grand Central Station. Therefore, they have been painted twice: once on the furniture, relating to their home in the Southern Hemisphere, and again with the Triangulum and Aries respectively, as if they have wriggled free from their corresponding stars and joined their friends in the Northern Hemisphere. However, although Bayer depicted the bee (Apes) in the South, there has historically been the 'fly' (Musca) depicted next to the ram in the North, though now this constellation is considered just to be part of Aries. Happily, the equator line runs exactly through the gold knob on the light switch, and the heating controls happen to sit on the zodiac line, which the Sun follows.

### **A Guide to the Stars**

During the course of a day, the stars appear to rotate about the North star, depicted on the top right corner of the wooden beam above the window. The thicker, striped line is the equator, which would be directly overhead if you were to stand on the Earth's equator, and is the path across the sky the stars appear to take as the Earth turns on its axis each day. The thinner line is the zodiac line, which is the path the Sun appears to take over the course of a year relative to the background stars. Above and to the left of Aries, the Sun is painted, where it would have been at the time of the wedding, putting us in the unusual situation of being able to see both Sun and stars at the same time. Venus is the large planet in the centre of the south end of the ceiling, and the brightest object, after the Sun, in the sky. Sirius or 'the dog star' is the large star roughly central on the ceiling next to the West wall. It is the brightest star in the sky, though in reality it is a pair of stars orbiting each other closely. Saturn is the planet in the centre of the door, painted with a ring, and Mars is close by.



Grand Central Station, New York, in 1914.



Grand Central Station in New York after repainting.



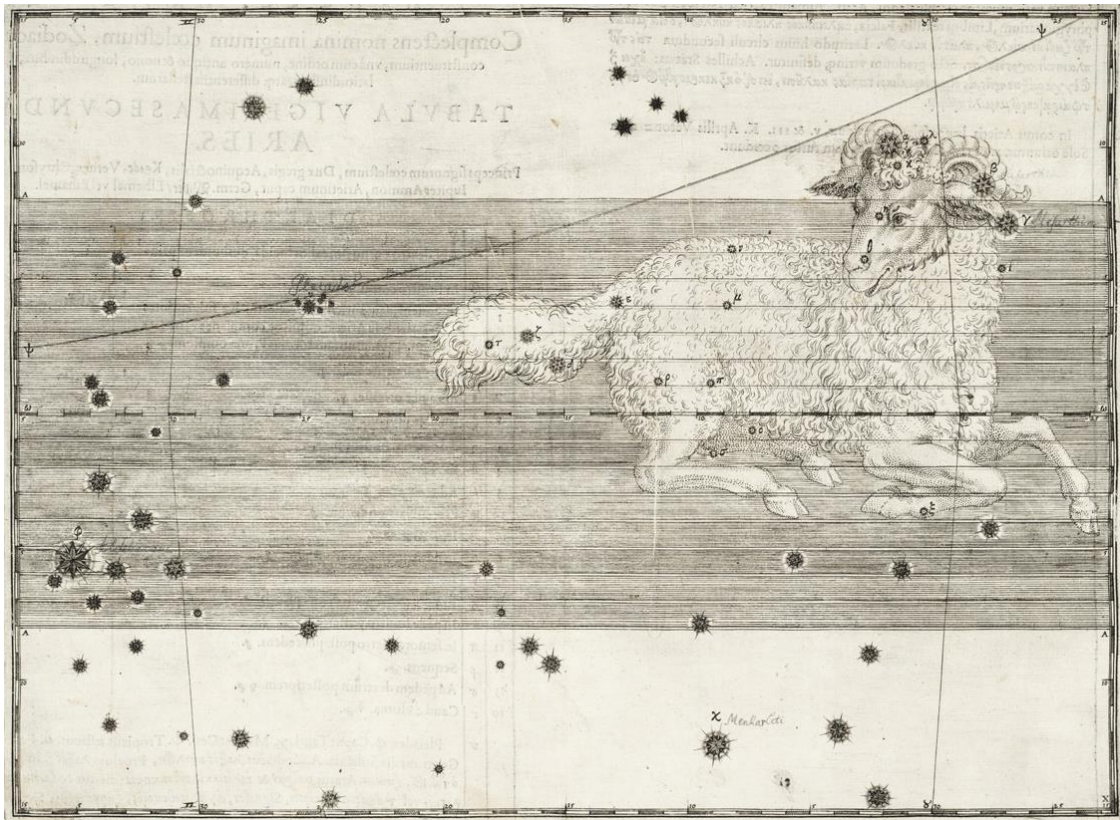


The Triangulum was added, possibly based on a design such as Cutler and Halley's design below.

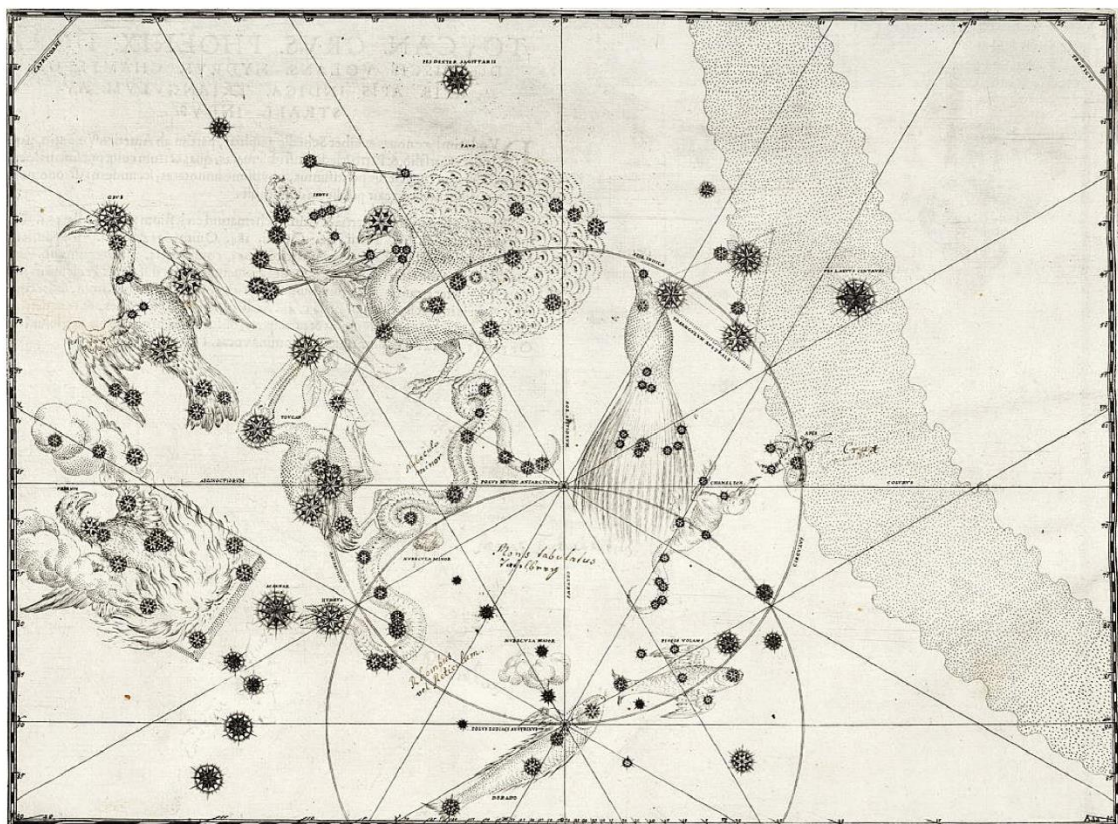


Detail from 'Atlas Maritimus & Commercialis' by Nathaniel Cutler and Sir Edmond Halley (1728).



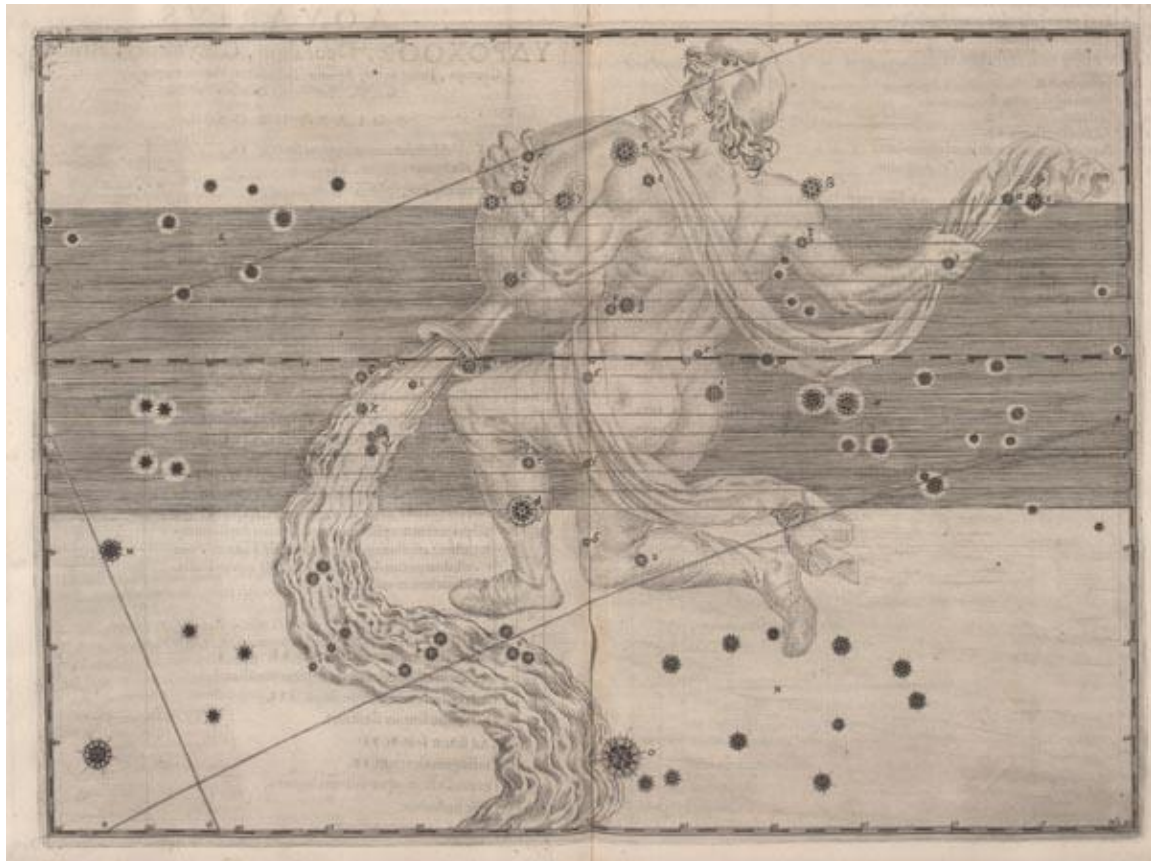


Aries, in Johann Bayer's *Uranometria*, 1603.

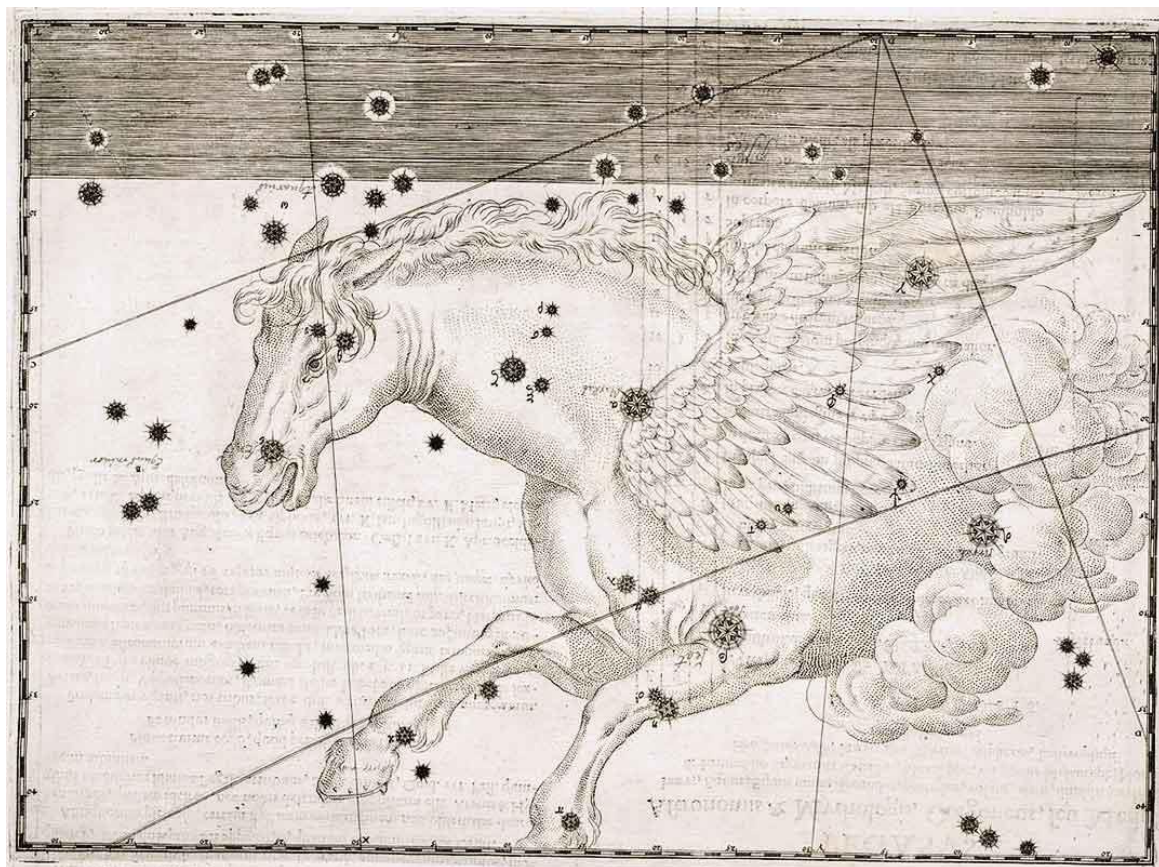


The Southern Hemisphere, in Johann Bayer's *Uranometria*, 1603. The Bee (Apes) and Triang-minor are depicted on the right.



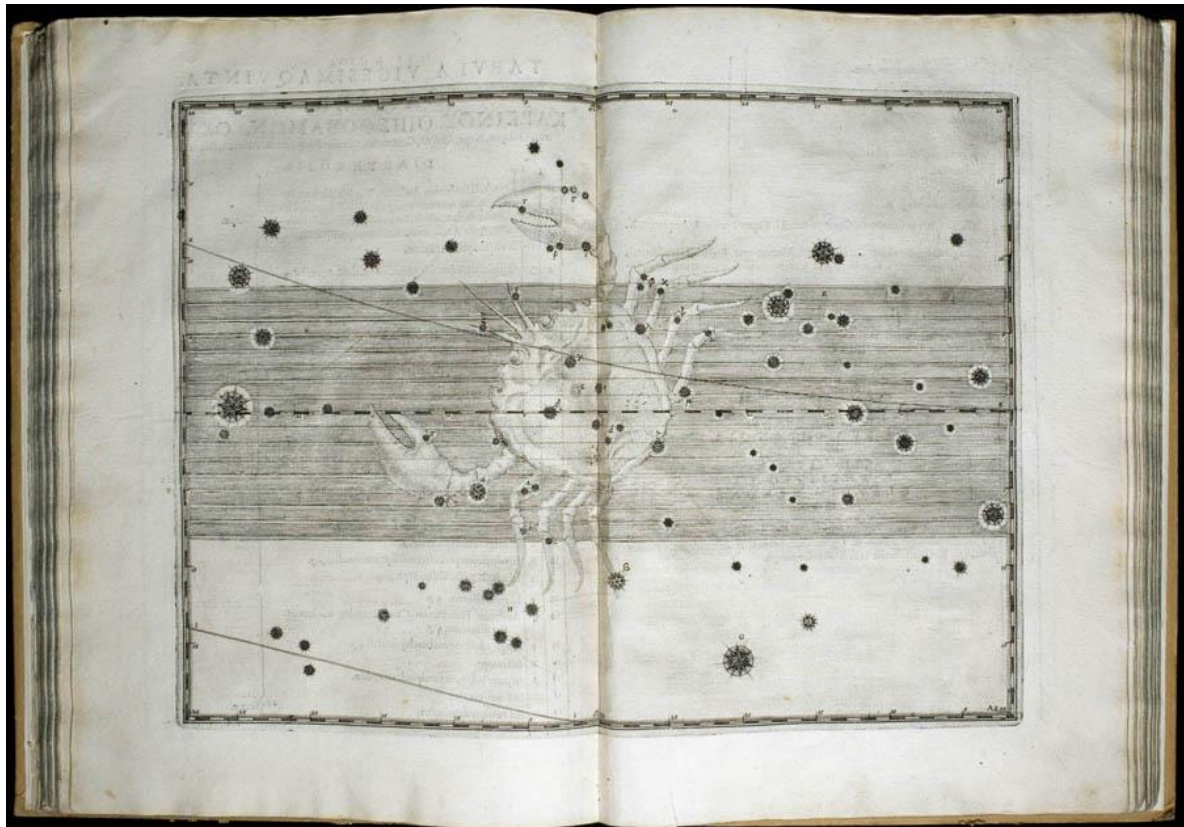


Aquarius, in Johann Bayer's *Uranometria*, 1603.

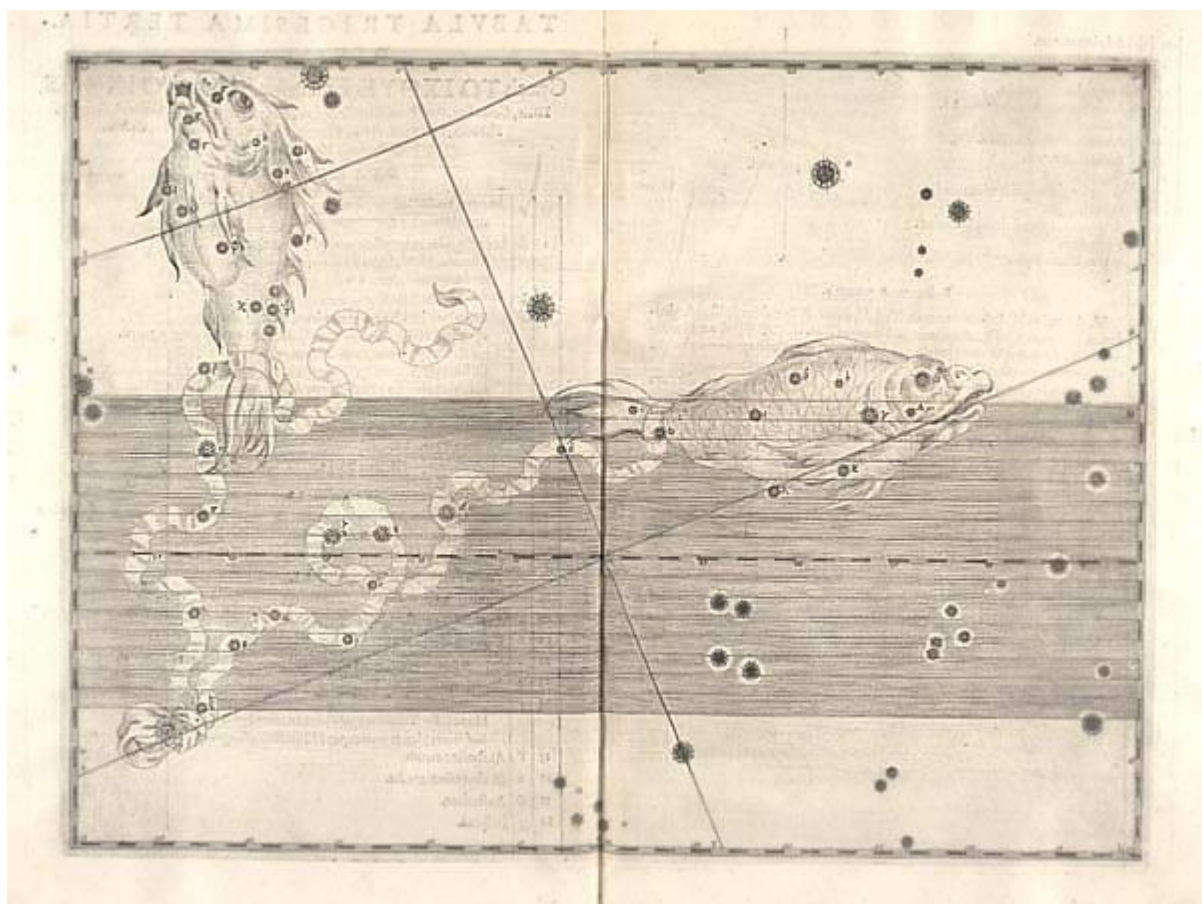


Pegasus, in Johann Bayer's *Uranometria*, 1603.





Cancer, in Johann Bayer's *Uranometria*, 1603.



Pisces, in Johann Bayer's *Uranometria*, 1603.

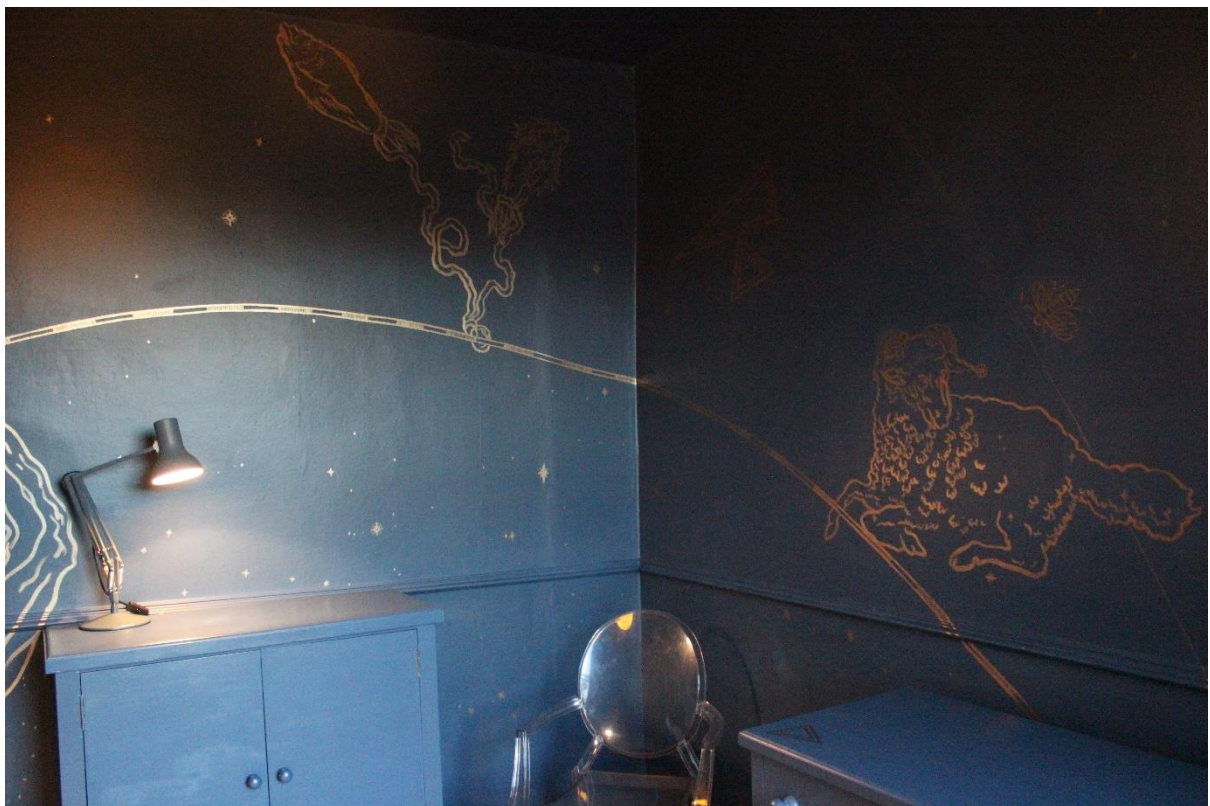
















**Capella (Alhajot)**  
**α Aur - 13 Aur - HIP 24608 - SAO 40186 - HD 34029 - HR 1708 - WDS J05167+4600Aa,Ab**

Type: double star  
Magnitude: 0.05  
Absolute Magnitude: -0.54  
Colour Index (B-V): 0.79  
RA/Dec (J2000.0): 5h16m41.50s/+45°59'48.1"  
RA/Dec (on date): 5h17m26.31s/+46°00'27.6"  
HA/Dec: 3h07m54.66s/+46°00'27.6"  
Az./Alt.: +278°45'32.0"/+59°06'03.1"  
Gal. long./lat.: +162°35'23.17°/+23°35'7.6"  
Supergal. long./lat.: +7°56'46.8"/-24°25'05.7"  
Ecl. long./lat. (J2000.0): +81°51'29.7"/+22°51'15.5"  
Ecl. long./lat. (on date): +81°59'58.0"/+22°51'15.5"  
Ecliptic obliquity (on date): +23°26'18.3"  
Mean Sidereal Time: 0h25m20.0s  
Apparent Sidereal Time: 0h25m21.0s  
Transit: 12h21m  
Circumpolar (never sets)  
IAU Constellation: Aur  
Distance: 42.80 ly  
Spectral Type: G1III + K0III  
Parallax: 0.07620"  
Position angle (2005): 328.00°  
Separation (2005): 0.046"  
Proper motions by axes: 56.2 / -542.1 (mas/yr)  
Position angle of the proper motion: 174.1°  
Angular speed of the proper motion: 545.0 (mas/yr)

Earth, Streatham, 0 m      FOV 120°    18.2 FPS    2010-06-05 15:30:00 UTC+00:00

| Date and time |         | Julian Day  |
|---------------|---------|-------------|
| 2010          | - 6 - 5 | 15 : 30 : 0 |



