

BRADLEY OBSERVATORY PLAZA

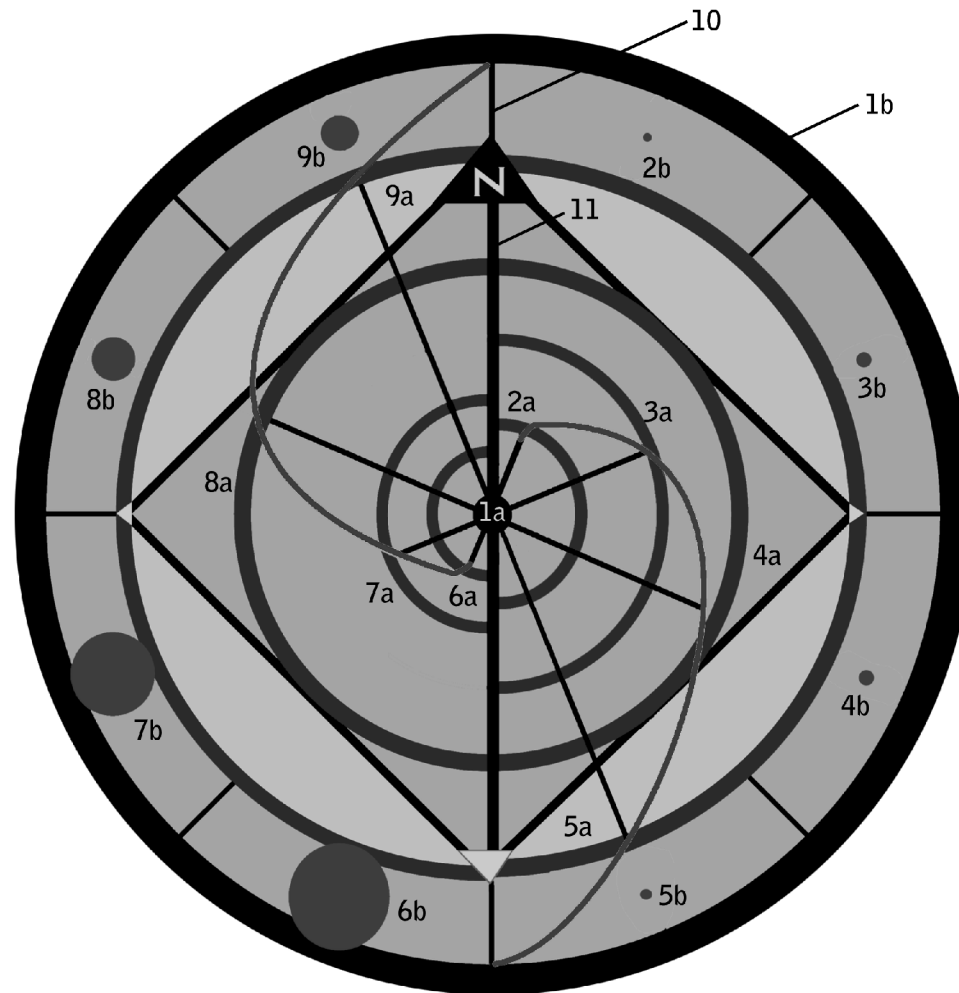
ABOUT THE PLAZA

The observatory plaza design, "Celestial Spheres," is an artistic representation of the solar system and the Milky Way galaxy. The aesthetic design was dictated by the envisaged usage—the plaza needed to function as a telescope viewing terrace by night and as a visual teaching tool by day. The granite design is a pattern of warm and cool colors that help distinguish the parts of the Solar System.

The large black outer circle represents the diameter of the Sun, and the blue circles around the periphery represent the relative sizes of the planets to the same scale, revealing the enormous differences in size between the Sun and individual planets.

With the central black circle giving the Sun's position, the red semicircles indicate the relative sizes of planetary orbits. The scales of the orbits are different on each side of the north-south axis, so that the orbit of Earth (on the eastern side) matches the orbit of Uranus (on the western side). This difference in scale is necessary because of the vastly different sizes of planets' orbits. The size of the central black circle represents the size of the Earth's orbit in the Jovian (western) scale. The lines that radiate from the Sun point to each of the planets, and terminate at that planet's orbit.

The two curves that connect the radial points suggest the spiral nature of the Milky Way. At this level, the large black outer band is the diameter of the galaxy and the complete circle within the square represents the solar system's orbit around the center of the galaxy. On this scale, the thin black lines in the outer planetary band represent the thickness of our galaxy's disk.



- 1a Circle radius indicates Earth - Sun Distance (western scale)
- 1b Diameter of Sun (or Diameter of Galaxy)
- 2a Orbit of Mercury ☿
- 2b Diameter of Mercury
- 3a Orbit of Venus ♀
- 3b Diameter of Venus
- 4a Orbit of Earth ⊕
- 4b Diameter of Earth
- 5a Orbit of Mars ♂
- 5b Diameter of Mars
- 6a Orbit of Jupiter ♃
- 6b Diameter of Jupiter
- 7a Orbit of Saturn ♄
- 7b Diameter of Saturn
- 8a Orbit of Uranus ♅
- 8b Diameter of Uranus
- 9a Orbit of Neptune ♆
- 9b Diameter of Neptune
- 10 Thickness of Galaxy
- 11 True North-points to North-star Polaris

The design for the Bradley Observatory plaza was a collaborative effort by Terry McGehee, Professor of Art and Christopher De Pree, Assistant Professor of Astronomy and Director of the Observatory.