

# FAIRBANKS MUSEUM & *planetarium*

## **Movement and Rhythms of the Heavens**

*Observing Project: Part 3*

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*The following instructions represent additional resources for continued study of the topics covered in our “Movement and Rhythms of the Heavens” online class. All materials are the property of Planetarium Director and Senior Meteorologist Mark Breen who created them.*

### **Instructions: Use Stellarium**

Observe the changing position of the Big Dipper, viewing it at the same time of night, over intervals of one month. You should be able to observe a change of approximately 5 degrees per month, or the width of your fist, held at arm’s length. This is equivalent to the nightly motion over 2 hours.

Use the program Stellarium to see where the Sun is located today against the background of stars (hint, turn the atmosphere off, and turn the constellation lines and names on). Now compare this with the traditional dates of the horoscope constellations or “signs.” Are they the same, or do they differ?

This question guides us to our next segment of the Movements and Rhythms of the Heavens – changes in the Earth’s orbit and axis over thousands of years.