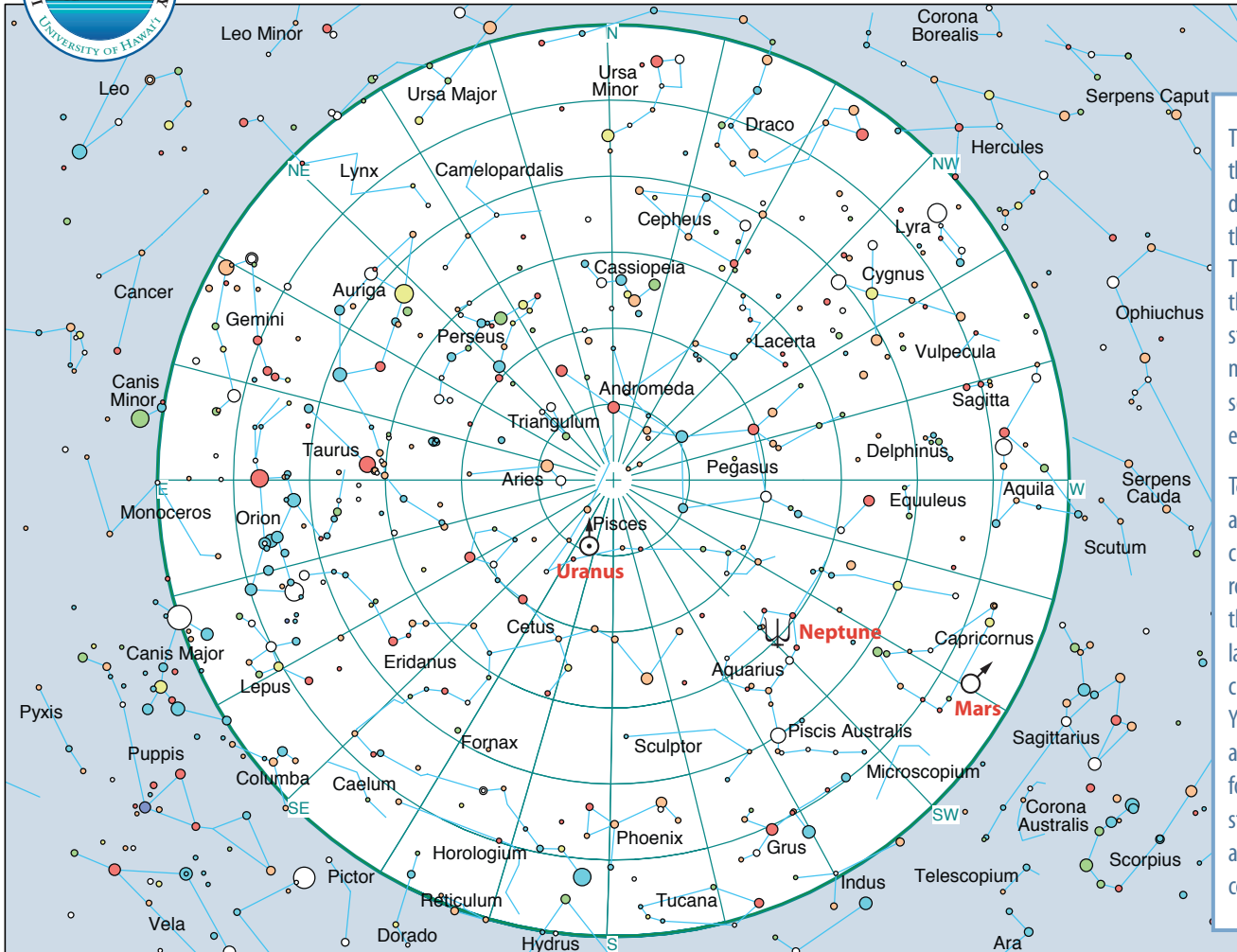




Evening Skies Over Hawai'i November 2016



This star chart shows the zenith, the point directly overhead, at the center of the chart. The circle represents the horizon, so the stars outside it are not visible, although some may rise in the east later in the night.

To find constellations and stars, hold the chart overhead and rotate the page until the correct direction labeled on the horizon circle is ahead of you. You should now be able to look back and forth between the star chart and the sky, and match the constellations.

Honolulu 2016-11-15 10:00 p.m. C: 219h13m +21°20' L: +270°00' 0:90° ARC HZ Cat: BSC
 On Nov. 1, the sky will appear as shown on the chart at about 11 p.m. On Nov. 30, it will appear as shown at about 9 p.m.

Produced using *Cartes du Ciel* Sky Charts program by Patrick Chevalley
 This free program is available at <http://www.stargazing.net/astropcl>

Magnitude: 0 1 2 3 4 B-V: < -0.3 -0.1 0.2 0.5 0.8 1.3 >

Planets: Mercury Venus Mars Jupiter Saturn Uranus Neptune

teramura Nov 2016



The star chart includes only the brightest stars to avoid cluttering the chart. The constellations are labeled, and the lines connecting their stars will help you find these celestial groupings.

Mercury is visible in the western sky just after sunset beginning about November 13. Venus, Mars, and Saturn are visible in the evening, although after November 23, Saturn is too close to the Sun to be visible. Jupiter is visible in the morning. Uranus and Neptune are visible for more than half the night.

Join us for these special events

O'ahu Events: call (808) 956-8566. UH Institute for Astronomy Open House April 17.

Maui Events: call (808) 573-9516
 Maikalani Community Lectures occur one Friday per month at the Maikalani building in Pukalani.

Hawaii Island Events: see www.mkaoc.org

Some of the most exciting science in the world is happening at the Institute for Astronomy (IfA), and you can be part of it! IfA scientists conduct research into galaxies, cosmology, stars, planets, and the Sun, as well as teaching undergraduate and graduate students at the University of Hawaii. We invite you to become part of the Friends and explore our amazing universe.

November Moon Phases

- First Quarter November 7
- Full Moon November 14
- Last Quarter November 20
- New Moon November 29

Monthly activities for the Friends of the Institute for Astronomy can be found at <http://www.ifa.hawaii.edu/friends/>
 Institute for Astronomy Special Events are announced at <http://www.ifa.hawaii.edu/specialevents/>