

Central Coast Astronomy Virtual Star Party

January 28th, 2022 at 7pm Pacific

Welcome to a new year of stargazing with us! This handout will have information that goes along with our interactive virtual stargazing tour with Aurora, Brian & Kent. We're going to focus on objects you can see with binoculars or a small telescope, so after our session, you can simply walk outside, know where to look, and really understand what you're looking at.

Before our session starts:

Step 1: Download your free map of the night sky: www.SkyMaps.com

Step 2: Click this link to join in: www.CentralCoastAstronomy.org/stargaze

Main Focus for the Session:

1. Cassiopeia (ancient Greek constellation)
 - a. NGC 459 (open cluster, mag 6.4, >200 stars, 7,900 ly dist, "Owl Cluster")
 - b. M103 (open cluster, mag 7.4, 70+ stars, 7,200 ly dist)
 - c. NGC 281 (emission nebula, mag 8.0, 9,600 ly dist, "Pacman Nebula")
 - d. NGC 7789 (open cluster, mag 7.8, >580 stars, "Caroline's Rose")
 - e. M52 (open cluster, mag 6.9, >130 stars, 4,600 ly dist)
 - f. NGC 7635 (emission nebula, mag 10.0, 7,100 ly dist,, "Bubble Nebula")

2. Andromeda (ancient Greek constellation)
 - a. M31 (spiral galaxy, mag 3.4, 2.5 million ly dist)
 - b. M32 (elliptical dwarf galaxy, mag 8.1, 2.5 million ly dist)
 - c. M110 (spheroidal dwarf galaxy, mag 8.1, 2.57 million ly dist)
 - d. NGC 7662 (planetary nebula, mag 8.3, 3,200 ly dist, "Blue Snowball Nebula")
 - e. NGC 891 (edge-on spiral galaxy, mag 9.9, 31 million ly dist, "The Outer Limits Galaxy")

Questions during the show?

Send an email to questions@CentralCoastAstronomy.org

"ly dist" refers to "light years distant"

Equipment Recommendations:

After a star gazing session, the first thing people want to do is buy a telescope. BUT telescopes are pretty useless unless you know where to point them! Instead, get yourself a nice pair of binoculars and do several star gazing sessions (with us virtually or in-person with your local astronomy club).

Binoculars for Astronomy:

Celestron Cometron 7x50 Binoculars (\$35) – great for kids!

Orion's UltraViews 10x50 (\$140)



Once you're more familiar with the patterns of the night sky, it's time to start thinking about owning a telescope. *The best telescope for you is the one you are going to use.* Here are our best recommendations for newbies to get started:

Beginner telescopes:

For kids: 8" Dobsonian Telescope: <https://bit.ly/2XEFaeK> (opt for Go-To capability) or the Classic 8" Dobsonian <https://bit.ly/3ABWqmM> (great for learning how to use one)

For adults: (this is really going to depend what you want to look at and what your typical "seeing conditions" are – we recommend visiting an in-person star-gazing session with your local astronomers *before* you purchase anything!)

8" Newtonian Reflector https://bit.ly/3f_3C0qS (easy to use, good all-around scope for deep sky objects, planets, moon)

8" Schmidt-Cassegrain <https://bit.ly/3dJkG59> (more compact, good all-around scope for planets, galaxies, nebulae, astrophotography)

90mm Refractor <https://bit.ly/37aG8lX> (harder to use, best for planets and moon observing)



Get connected with your local astronomy club and get star gazing!

