



# The New Syzygy

The Newsletter of the Kern Astronomical Society

number 605

2026

Our regular monthly meeting will be held at  
**Round Table Pizza**  
4200 Gosford Rd, Bakersfield, CA 93313

## February 6

Social Hour @ 6:00p  
Meeting @ 7:00p



[facebook.com/groups/syzygy](https://facebook.com/groups/syzygy)



[kernastro.org](http://kernastro.org)



[kernastronomicalsociety@gmail.com](mailto:kernastronomicalsociety@gmail.com)

## UPCOMING EVENTS

### Star Party

February 14 at the Frazier Mountain Trailhead, weather permitting. [Click for map](#)

### BC Planetarium Show

Dr. Strobel's final show is on Feb 26! See more details on page 3.

## PUBLIC OUTREACH

Cesar Chavez Elementary – 2/18, 5-6:30p

Harding Elementary – 2/19, 5-7:30p

Horizon Elementary – 2/20, 5-7:30p

Munsey Elementary – 2/25, 5-6p

Dark Skies Festival – Sept 11-13

## VOLUNTEERS NEEDED

If you're interested in helping assist in any of our public outreach meetings, please email us and let us know!

[kernastronomicalsociety@gmail.com](mailto:kernastronomicalsociety@gmail.com)

## IN THE SKY

Mercury will be at its highest point in the sky on Feb 19 and will be just above the sun. Look for it shortly after sunset between 6:15pm and about 6:45pm. A narrow viewing window!

# METEORITES

Presented by Robert Crewdson  
Club Member

My name is Bob Crewdson and I was born and raised in Rochester, New York, where, as a kid, I watched my father spend a winter hand-grinding a 6-inch mirror for a Newtonian telescope. I found that only the moon looked interesting through it. I spent a decade at the Colorado School of Mines earning B.Sc., M.Sc., and Ph.D. degrees in engineering, geology, and geophysics. I bought a Questar 3.5 telescope and some camera gear to photograph the 1979 total solar eclipse in Grassrange, Montana. I subsequently chased and photographed the total solar eclipses in 1991, 2017, and 2024, as well as the Venus transit of the sun in 2012 and a number of total lunar eclipses, all with the same gear. These days most of my sky viewing is with a pair of Canon image-stabilized binoculars and a lawn chair. After running out of rocks to collect, I focused on meteorites from about 1990 to 2010.

My presentation will include a slide show, some video clips, and some hands-on, genuine meteorites from my collection, including a piece of the Moon!



## UPCOMING SPEAKERS

- Mar 6 Cancelled – TBA
- Apr 3 Angela Dorsey – JPL  
TBA
- May 1 Sam Rose – Caltech  
TBA
- Jun 5 Sarah Elizabeth McCandless – JPL  
NEO Surveyor
- Aug 7 Daniel Huecker – Sequoia Parks  
Conservancy – Dark Sky Festival
- Sep 4 Rod Guice – Club Member  
Milankovitch Cycle



# HOW BIG? HOW FAR?

BC Planetarium Show

Presented by Dr. Nick Strobel

KCAS members have the wonderful opportunity to enjoy an exclusive show at the Bakersfield College William M. Thomas Planetarium titled ***How Big? How Far?***

Tickets will be on sale at the December, January, and February KCAS club meetings.

A few seats are left so bring cash or a check to the February meeting!

Thursday, February 26, 2026

Bakersfield College

\$10 per ticket

\$5 parking

Doors close at 7pm.

The Kern County Astronomical Society would like to thank Dr. Strobel for all his work in bringing us these amazing shows!



**BAKERSFIELD  
COLLEGE**



# 2025-26 KERN COUNTY ASTRONOMICAL SOCIETY SCHEDULE

**REMINDER** – Below is a list of our upcoming meetings for the 25-2026 club year. Monthly club meetings will be held at the Round Table Pizza at 4200 Gosford Rd. from 6pm to roughly 9pm. Monthly board member meetings are held the last Thursday of every month at 5060 California Ave #600 from 6pm to 7pm. We would like to remind everyone that club members are welcome to join our board meetings!

## BOARD MEETINGS

October 30  
November 20 \*  
December 18 \*  
January 29  
February 26  
March 26  
April 30  
May 28  
June – no meeting  
July 30  
August 27  
September 24

\* Moved one week early due to holidays

## CLUB MEETINGS

November 7  
December 5  
January 9  
February 6  
March 6  
April 3  
May 1  
June 5  
July – no meeting  
August 7  
September 4



## KAS Information

Since 1956, the Kern County Astronomical Society has promoted community awareness of current events in astronomy and provides a forum for sharing of knowledge and experiences among amateur astronomers. Annual membership is \$35.00 which also provides membership in the Amateur Astronomical League, access to their newsletter (Reflector Magazine), and participation in observational programs.

## Star Parties & Outreach

The Kern County Astronomical Society typically has two Club Star Parties each month depending on the weather. Our Club Parties are held on Saturdays nearest the New Moon. We also host Public Star Parties at various locations around town during April - October. These parties are held on Saturdays nearest the first quarter Moon. In addition, we also host Lunar, Solar, and Planetary viewing for public schools. Requests may be directed to our Star Party Coordinator.

## Club Equipment

The Kern County Astronomical Society has telescopes and accessories (listed below) available for loan to Club Members in good standing. Members are encouraged to borrow the different types of telescopes in stock (especially if you are considering purchasing one). Trying out different sizes and types of telescopes can help you make an informed decision about purchases. If you have a Club telescope in your possession, you will be expected to participate in at least one public star party.

- **6" f/6, 8" f/6, 10" f/5.6, 13" f/4.5 Dobsonian Telescopes**
- **Parks Jovian 90**
- **3½" f/13 Maksukov-Cassegrain**
- **4" f/15 Unitron Refractor**
- **8" Solar Filter**
- **Assorted Eyepieces**



## About the Celestial Objects

Listed on this page are several of the brighter, more interesting celestial objects visible in the evening sky this month (refer to the monthly sky map). The objects are grouped into three categories. Those that can be easily seen with the naked eye (that is, without optical aid), those easily seen with binoculars, and those requiring a telescope to be appreciated. **Note, all of the objects (except single stars) will appear more impressive when viewed through a telescope or very large binoculars.** They are grouped in this way to highlight objects that can be seen using the optical equipment that may be available to the star gazer.

## Tips for Observing the Night Sky

When observing the night sky, and in particular deep-sky objects such as star clusters, nebulae, and galaxies, it's always best to observe from a dark location. Avoid direct light from street lights and other sources. If possible observe from a dark location away from the light pollution that surrounds many of today's large cities.

You will see more stars after your eyes adapt to the darkness—usually about 10 to 20 minutes after you go outside. Also, if you need to use a torch to view the sky map, cover the light bulb with red cellophane. This will preserve your dark vision.

Finally, even though the Moon is one of the most stunning objects to view through a telescope, its light is so bright that it brightens the sky and makes many of the fainter objects very difficult to see. So try to observe the evening sky on moonless nights around either New Moon or Last Quarter.

## Astronomical Glossary

**Conjunction** – An alignment of two celestial bodies such that they present the least angular separation as viewed from Earth.

**Constellation** – A defined area of the sky containing a star pattern.

**Diffuse Nebula** – A cloud of gas illuminated by nearby stars.

**Double Star** – Two stars that appear close to each other in the sky; either linked by gravity so that they orbit each other (binary star) or lying at different distances from Earth (optical double). Apparent separation of stars is given in seconds of arc (").

**Ecliptic** – The path of the Sun's center on the celestial sphere as seen from Earth.

**Elongation** – The angular separation of two celestial bodies. For Mercury and Venus the greatest elongation occurs when they are at their most angular distance from the Sun as viewed from Earth.

**Galaxy** – A mass of up to several billion stars held together by gravity.

**Globular Star Cluster** – A ball-shaped group of several thousand old stars.

**Light Year (ly)** – The distance a beam of light travels at 300,000 km/sec in one year.

**Magnitude** – The brightness of a celestial object as it appears in the sky.

**Open Star Cluster** – A group of tens or hundreds of relatively young stars.

**Opposition** – When a celestial body is opposite the Sun in the sky.

**Planetary Nebula** – The remnants of a shell of gas blown off by a star.

**Universal Time (UT)** – A time system used by astronomers. Also known as Greenwich Mean Time. USA Eastern Standard Time (for example, New York) is 5 hours behind UT.

**Variable Star** – A star that changes brightness over a period of time.

NORTHERN HEMISPHERE  
FEBRUARY 2026

CELESTIAL OBJECTS

Sky  
maps  
com

## Easily Seen with the Naked Eye

Capella	• The 6th brightest star. Appears yellowish in color. Spectroscopic binary. Dist=42 ly.
Sirius	• The brightest star in the sky. Also known as the "Dog Star". Dist=8.6 ly.
CMi	• Greek name meaning "before the dog" - rises before Sirius (northern latitudes). Dist=11.4 ly.
Cep	• Cepheid prototype. Mag varies between 3.5 & 4.4 over 5.366 days. Mag 6 companion.
δ Cephei	• Brightest star in Cygnus. One of the greatest known supergiants. Dist=3,000 ly.
Deneb	• Multiple star system with 6 components. 3 stars visible in telescope. Dist=52 ly.
Castor	• With Castor, the twin sons of Leda in classical mythology. Dist=34 ly.
Pollux	• Brightest star in Leo. A blue-white star with at least 1 companion. Dist=77 ly.
Regulus	• The brightest star in Orion. Blue supergiant star with mag 7 companion. Dist=770 ly.
Rigel	• One of the largest red supergiant stars known. Diameter=300 times that of Sun. Dist=430 ly.
Betelgeuse	• Famous eclipsing binary star. Magnitude varies between 2.1 & 3.4 over 2,867 days.
Algol	• The Seven Sisters. Spectacular cluster. Many more stars visible in binoculars. Dist=380 ly.
Pleiades	• Large V-shaped star cluster. Binoculars reveal many more stars. Dist=152 ly.
Hyades	• Brightest star in Taurus. It is not associated with the Hyades star cluster. Dist=65 ly.
Aldebaran	• The North Pole Star. A telescope reveals an unrelated mag 8 companion star. Dist=433 ly.
Polaris	

## Easily Seen with Binoculars

M31	• The Andromeda Galaxy. Most distant object visible to naked eye. Dist=2.5 million ly.
M38	• Stars appear arranged in "pi" or cross shape. Dist=4,300 ly.
M36	• About half size of M38. Located in rich Milky Way star field. Dist=4,100 ly.
M37	• Very fine star cluster. Discovered by Messier in 1764. Dist=4,400 ly.
M44	• Praesepe or Beehive Cluster. Visible to the naked eye. Dist=590±20 ly.
M41	• First recorded observation by Aristotle in 325 BC as "cloudy spot". Dist=2,300 ly.
μ Cephei	• Herschel's Garnet Star. One of the reddest stars. Mag 3.4 to 5.1 over 730 days.
Mira	• Famous long period variable star. Mag varies between 3.0 & 10.1 over 332 days.
M39	• May be visible to the naked eye under good conditions. Dist=900 ly.
M35	• Fine open cluster located near foot of the twin Castor. Dist=2,800 ly.
M48	• 12+ stars in 7x binoculars. Triangular asterism near centre. Dist=1,990 ly.
γ Leporis	• Visible with binoculars. Gold & white stars. Mags 3.6 & 6.2. Dist=30 ly. Sep=96.3".
2232	• A large scattered star cluster of 20 stars. Dist=1,300 ly.
2244	• Surrounded by the rather faint Rosette Nebula. Dist=5,540 ly.
M50	• Visible with binoculars. Telescope reveals individual stars. Dist=3,000 ly.
Cr 69	• Lambda Orionis Cluster. Dist=1,630 ly.
Ori	• The Great Orion Nebula. Spectacular bright nebula. Best in telescope. Dist=1,300 light years.
M42	• Double Cluster in Perseus. NGC 869 & 884. Excellent in binoculars. Dist=7,300 ly.
Double Cluster	• Double Cluster in Perseus. NGC 869 & 884. Excellent in binoculars. Dist=7,300 ly.
M47	• Bright star cluster. 15+ stars in 7x binoculars. Dist=1,500 ly.
M46	• Dist=5,400 ly. Contains planetary NGC 2438 (Mag 11, d=65") - not associated.
Mizar & Alcor	• Good eyesight or binoculars reveals 2 stars. Not a binary. Mizar has a mag 4 companion.
UMa	

## Telescopic Objects

γ Andromedae	• Attractive double star. Bright orange star with mag 5 blue companion. Sep=9.8".
γ Arietis	• Impressive looking double blue-white star. Visible in a small telescope. Sep=7.8".
M67	• Contains 500+ stars mag 10 & fainter. One of the oldest clusters. Dist=2,350 ly.
M94	• Compact nearly face-on spiral galaxy. Dist=15 million ly.
M51	• Whirlpool Galaxy. First recognised to have spiral structure. Dist=25 million ly.
η Cassiopeiae	• Yellow star mag 3.4 & orange star mag 7.5. Dist=19 ly. Orbit=480 years. Sep=12".
61 Cygni	• Attractive double star. Mags 5.2 & 6.1 orange dwarfs. Dist=11.4 ly. Sep=28.4".
θ Eridani	• Striking blue-white double star. Mags 3.2 & 4.3. Visible in a small telescope. Sep=8.2".
γ Leonis	• Superb pair of golden-yellow giant stars. Mags 2.2 & 3.5. Orbit=600 years. Sep=4.4".
β Monocerotis	• Triple star. Mags 4.6, 5.0 & 5.4. Requires telescope to view arc-shape. Sep=7.3".
2264	• Christmas Tree Cluster. Associated with the Cone Nebula. Dist=2,450 ly.
σ Orionis	• Superb multiple star. 2 mag 7 stars one side, mag 9 star on other. Struve 761 triple in field.
κ Puppis	• Telescope easily shows two blue-white stars of almost equal brightness. Sep=9.9".
M1	• Crab Nebula. Remnant from supernova which was visible in 1054. Dist=6,500 ly.
M33	• Fine face-on spiral galaxy. Requires a large aperture telescope. Dist=2.3 million ly.
M81	• Beautiful spiral galaxy visible with binoculars. Easy to see in a telescope.
M82	• Close to M81 but much fainter and smaller.