

# Antares

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## The Newsletter of the Kansas Astronomical Observers

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Meeting time: **November 17, 2018**      **3:00 pm**

Location: **Great Plains Nature Center (GPNC)**

Speaker: **Cassie Gearhart**  
Topic: **Rockets**

**KAO Website:** <http://www.kaowichita.com>  
**The Night Sky Network:** <http://www.nightsky.jpl.nasa.gov>  
**The Astronomical League:** <http://www.astroleague.org>

If you have comments or suggestions for an article in the newsletter, e-mail them to:  
[kevin.l.kight@gmail.com](mailto:kevin.l.kight@gmail.com) \*Please begin the subject line with "Antares"

### *Current Club Officials*

<b>President:</b>	<b>Jerelyn Ramirez</b>	<a href="mailto:jerelyn.ramirez@gmail.com">jerelyn.ramirez@gmail.com</a>
<b>Vice-President:</b>	<b>Tony Haidai</b>	<a href="mailto:thaidai@cox.net">thaidai@cox.net</a>
<b>Treasurer:</b>	<b>Paul Ramirez</b>	<a href="mailto:ramirezpm2@gmail.com">ramirezpm2@gmail.com</a>
<b>Newsletter/Media:</b>	<b>Kevin Kight</b>	<a href="mailto:kevin.l.kight@gmail.com">kevin.l.kight@gmail.com</a>

**Next Month's Meeting: December 15 @ 3:00pm, Great Plains Nature Center (GPNC)**

# **Club Updates:**

## **Call for Meeting Speakers:**

For those members that wish to create and present during a club meeting, or that have a suggestion for a guest speaker during the fall and winter meetings, contact the Club Vice-President: Tony Haidai ([thaidai@cox.net](mailto:thaidai@cox.net))

## **Newsletter Items for Publication:**

Please submit items for publication prior to the 10<sup>th</sup> of each month to be included in that month's newsletter.

## **Eyepieces for Sale:**

See addendum for a collection of TeleVue Eyepieces club member David Stanislaw is wishing to sell. Just a note that the prices are his asking price, and is open to negotiation.

## **New Club T-shirts available:**

Club T-Shirts are in for those who ordered one, they can be picked up at the meeting. Make check out to KAO if you plan to pay by check.

## **Club Membership Update:**

We have a total of 1 new club members since our last meeting, they are:

- Stacia Kaylor is a new club member from Andover

Current head count of 71 club members.

## **October Club Meeting:**

See addendum for a short summary about the October club meeting.

## **Astronomy Calendars are now available:**

Contact [Paul Ramirez](#) to reserve your calendar today. Supply is limited but we can order more if needed. There will be some available at the meeting.

# Solar and Planetary Items:

## **Moon Phases:**

**Last Quarter:** October 31  
**New Moon:** November 7  
**First Quarter:** November 15  
**Full Moon:** November 22

**Last Quarter:** November 29  
**New Moon:** December 7  
**First Quarter:** December 15  
**Full Moon:** December 29

## **Planets:**

**Mercury** – Visible in the evening (Inferior conjunction Nov. 27<sup>th</sup>) setting approximately 7:10 pm

**Venus** – Visible in the morning rises approximately 5:45 am

**Mars** – Visible in the evening. In the south after sunset setting approximately 1:20 am

**Jupiter** – Hidden by Solar Glare (Conjunction on Nov. 26th)

**Saturn** – Visible in the West after sunset in Sagittarius, setting approximately 9:00 pm

**Uranus** – Visible in Aries; transiting approximately 10:40 pm

**Neptune** – Visible in Aquarius; transiting approximately 1:30 pm

Leonid meteor Shower Peaks the evening of November 17th

## Comets:

Listed below are comets possibly visible in telescopes from the Wichita area (approximately cutoff at magnitude 15). Magnitudes shown are approximate predictions for mid-month. Links are provided for additional information:

<http://cometchasing.skyhound.com/>

**21P/Giacobini-Zinner:** An early morning comet in Canis Major

Magnitude 11.5

<https://theskylive.com/21p-info>

**38P/Stephan-Oterma:** An early morning comet in Gemini

Magnitude 10.7

<https://theskylive.com/38p-info>

**64P/Swift-Gehrels:** An all night comet in Andromeda

Magnitude 9.2

<https://theskylive.com/64p-info>

**46P/Wirtanen:** An evening comet low in the sky in Fornax.

Magnitude: 7.5

<https://theskylive.com/46p-info>

## **Event Reports:**

If you've participated in a club event, please submit an event report to be included here by the 10<sup>th</sup> of each month. It doesn't have to be anything formal, just a brief description about the event and how it went. Credit will be given unless you request to be kept anonymous.

### **InOMN Events at GPNC & LAPO**

See Addendum for a report of the International Observe the Moon Night outreach events.

### **Blue Valley yacht Club Event**

See Addendum for a report of the Blue Valley Yacht Club outreach event.

### **Volland Store Event**

See Addendum for a report of the Volland Store outreach events

## **Upcoming Regional Events:**

## **Upcoming KAO/Public Events:**

### **Heights Astronomy Night – November 15**

**Heights High School**, 5301 N Hillside, Wichita, KS

(7:30 PM - 9:00 PM )

**Setup Time:** 7:00 PM

Heights Astronomy Night at the Heights High School in Wichita Kansas. Come on out to the 6th Annual Astronomy Night. The Kansas Astronomical Observers will be providing telescopes for viewing the night sky. What will we see; well the first quarter Moon will be on display high in the sky right near the planet Mars, both in the constellation Aquarius. If we are lucky we can catch Saturn to the west before it sets in the constellation Sagittarius.

This event is open to all visitors. Come one come all, all are welcome.

If we have clouded out skies we will set up inside and have the visitors look at the telescopes up close and discuss other astronomy related topics.

See NSN Calender for details.

## Featured Article:



**This article is distributed by NASA Night Sky Network**

The Night Sky Network program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit [nightsky.jpl.nasa.org](https://nightsky.jpl.nasa.org) to find local clubs, events, and more!

### **November's Dance of the Planets**

By Jane Houston Jones and David Prosper

November's crisp autumn skies bring great views of our planetary neighbors. The Moon pairs up with Saturn and Mars in the evenings and mornings feature eye-catching arrangements with dazzling Venus. Stargazers wanting a challenge can observe a notable opposition by asteroid 3 Juno on the 17<sup>th</sup> and watch for a few bright Leonid meteors.

Red **Mars** gleams high in the southern sky after sunset. **Saturn** sits westward in the constellation Sagittarius. A young crescent Moon passes near Saturn on the 10<sup>th</sup> and 11<sup>th</sup>. On the 15<sup>th</sup> a first quarter Moon skims by Mars, coming within 1 degree of the planet. The red planet receives a new visitor on November 26<sup>th</sup>, when NASA's InSight mission lands and begins its investigation of the planet's interior. News briefings and commentary will be streamed live at: [bit.ly/landsafe](https://bit.ly/landsafe)

Two bright planets hang low over the western horizon after sunset as November begins: **Jupiter** and **Mercury**. They may be hard to see, but binoculars and an unobstructed western horizon will help determined observers spot them right after sunset. Both disappear into the Sun's glare by mid-month.

Early risers are treated to brilliant **Venus** sparkling in the eastern sky before dawn, easily outshining everything except the Sun and Moon. On November 6<sup>th</sup>, find a location with clear view of the eastern horizon to spot Venus next to a thin crescent Moon, making a triangle with the bright star Spica. The following mornings watch Venus move up towards Spica, coming within two degrees of the star by the second full week of November. Venus will be up three hours before sunrise by month's end – a huge change in just weeks! Telescopic observers are treated to a large, 61" wide, yet razor-thin crescent at November's beginning, shrinking to 41" across by the end of the month as its crescent waxes.

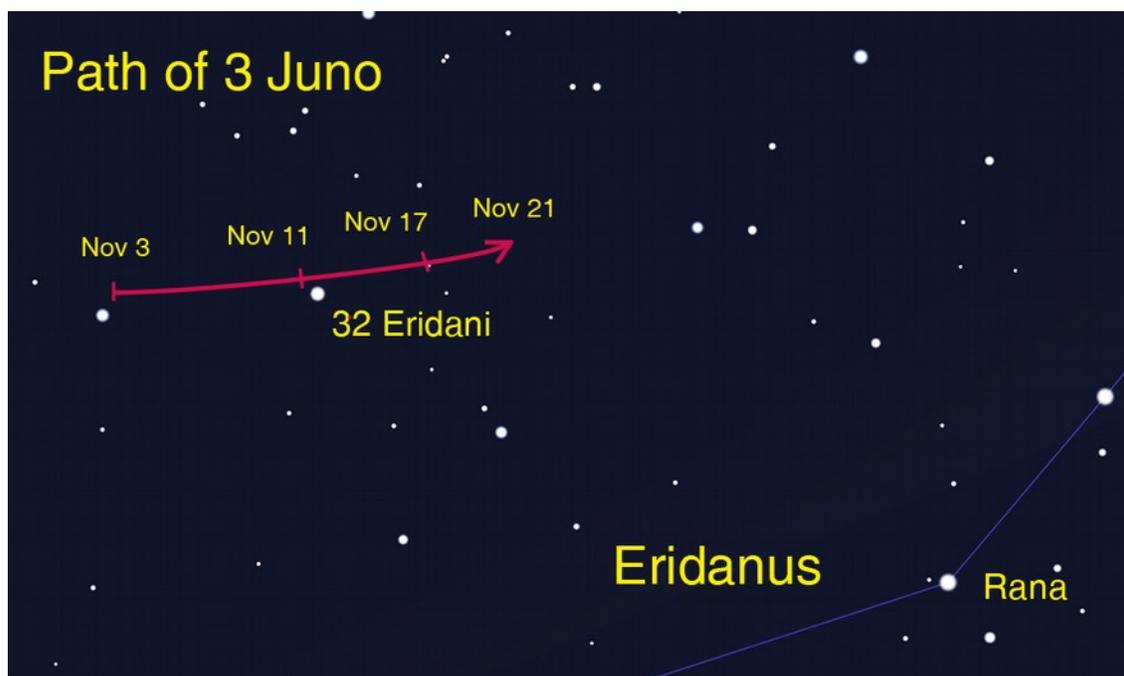
Observers looking for a challenge can hunt asteroid **3 Juno**, so named because it was the third asteroid discovered. Juno travels through the constellation Eridanus and rises in the east after sunset. On November 17<sup>th</sup>, Juno is at opposition and shines at magnitude 7.4, its brightest showing since 1983! Look for Juno near the 4.7 magnitude double star 32 Eridani in the nights leading up to opposition. It is bright enough to spot through binoculars, but still appears as a star-

like point of light. If you aren't sure if you have identified Juno, try sketching or photographing its star field, then return to the same area over the next several days to spot its movement.

The **Leonids** are expected to peak on the night of the 17<sup>th</sup> through the morning of the 18<sup>th</sup>. This meteor shower has brought “meteor storms” as recently as 2002, but a storm is not expected this year. All but the brightest meteors will be drowned out by a waxing gibbous Moon. Stay warm and enjoy this month's dance of the planets!

You can catch up on all of NASA's current and future missions at [nasa.gov](https://nasa.gov).

With articles, activities and games **NASA Space Place** encourages everyone to get excited about science and technology. Visit [spaceplace.nasa.gov](https://spaceplace.nasa.gov) to explore space and Earth science!



*Caption: This finder chart shows the path of the asteroid 3 Juno as it glides past 32 Eridani in November 2018. The asteroid's position is highlighted for selected dates, including its opposition on the 17th. Image created in Stellarium for NASA Night Sky Network.*