From the President

New Minor Planet Named

International Astronomical Union gives minor planet 1985 CZ₁ the name Brevardastro to honor the Brevard Astronomical Society.

In a recent meeting the Minor Planets and Comets Division (Division F Working Group Small Bodies Nomenclature (SBN)) of the International Astronomical Union voted to give the minor planet 1985 CZ₁ the name Brevardastro. 1985 CZ₁ was discovered on February 12, 1985 by H. Debehogne at the European Southern Observatory.

A Parent

1. Encourage your child to explore the night sky through words by writing a poem for the AstroPoetry Contest and AstroArt Contest. They could even win a great prize!
2. Is your local astronomy club holding a Global Star Party event? Great for the whole family!
3. Check out our Observing Challenges. There are plenty of activities that children can do without any special equipment. Ask questions and discuss them on our Facebook page and in our forum. There are plenty of astronomers there to help you out!

A Teacher

1. Get your class writing and creating! There are two fun contests about the night sky – AstroPoems and AstroArt.
2. Take part in the Asteroid Search Campaign. Apply by March 15 and your class might be selected to help discover new objects in the solar system!

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An Astronomy Club
1. The Global Star Party is the big kickoff event! Plan a club event or hold one yourself. Star parties are the ultimate in community outreach. No fancy equipment needed—a small telescope or binoculars will show things people have never seen. Don’t forget to register your event!
2. Are you holding an event for the Global Star Party? Do you have a Facebook page? Register to do a Facebook Live video, along with other clubs around the world. Share outreach in your country and be part of a truly global star party!
3. The Observing Challenges are a great way to bring in new people and help them get a start in astronomy. Plan an event to help newcomers with the Challenges and show them how much fun astronomy is. It’s a great way to help others, share the fun, and recruit new members!
4. Include people with disabilities in your events using these resources. One will be featured on our Facebook page every day throughout GAM. Astronomy is for everyone!

A Novice
1. Tune in to the Online Messier Marathon, a crash course in observing the wonders of the Universe. With the Virtual Telescope, Dr. Gianluca Masi is your guide as you explore the Universe. You only need an internet connection to take part.
2. Attend a Global Star Party event. Ask local astronomy clubs or observatories if they’re holding an event and check out the event list. If not, suggest that they do! Star parties are a great way to get started in astronomy. Look through telescopes and chat with those in the hobby. Astronomers love to share the fun!
3. Be a citizen scientist by taking part in Globe at Night. You’ll measure night sky brightness in your area to help determine the spread and impact of light pollution. It’s a great way to get involved in scientific research and get familiar with the night sky while you’re at it!

An Art Lover
1. Watch the Cosmic Concert, a live performance of an original production each year. The Cosmic Concert combines new music by composer/performer Giovanni Renzo with images and time-lapses of the night sky for a unique and awe-inspiring experience. Send your own astronomy artwork or images to info@giovannirenzo.it and your work may even be featured!
2. Express your feelings about astronomy by entering the AstroPoetry and AstroArt contests. You might even win one of the great prizes!

For Everyone
1. Plan an astronomy event during GAM 2017. Then, be sure to register it. Share what you’re doing with the rest of the world and be a part of the global celebration of astronomy!
2. Check out our Observing Resources and People with Disabilities Astronomy Resources to see how you might do something special for GAM 2017.
3. Share your experience with the world on Facebook and Tweet using #GAM2017 hashtag (@gam_awb).

TRAPPIST-1 is a planetary system, located 12 parsecs away from the Solar system (39 light years), near the ecliptic, within the constellation of Aquarius. Around a star which is 12 times less massive than the Sun and only slightly larger than Jupiter, there are at least seven planets in orbit. The initial discovery was made by TRAPPIST, the TRAnsiting Planets and Planetesimals Small Telescope. Additional planets were subsequently identified using TRAPPIST and the Spitzer space telescope, the Very Large Telescope, UKIRT, the Liverpool Telescope and the William Herschel Telescope.

All the planets in the TRAPPIST-1 system transit their star, meaning that they pass in front of it. The planets were discovered from the regular and repeated shadows that are cast during transit. Thanks to the transit signals we could measure the orbital periods of the planets and could calculate the sizes of the planets. The exact time at which the planets transit also provide us with a means to measure their masses, which leads to knowing their densities and therefore their bulk properties. The planets are consistent with a rocky composition.

We found that the planets have sizes and masses comparable to the Earth and Venus. Because we know the distance of the planets to their star, and the temperature of the star, we can deduce that they receive an amount of light that is similar to many of the planets in the Solar system, from Mercury to beyond Mars.

During transit, some of the starlight goes through the atmosphere of the planets, getting transformed by the chemical composition of the atmosphere and by its vertical structure. This means that we can remotely study the climates of terrestrial worlds beyond our Solar system! The TRAPPIST-1 worlds are the most optimal currently at our disposal. They are providing humanity with its first opportunities at discovering evidence of biology beyond the Solar system.

This website is edited by members of the discovery team of TRAPPIST-1 and contains scientific information about the system as well as artistic and educational material. Our aim is to collect our best and most up-to-date knowledge of this system, while communicating our fascination and awe for the remote worlds of TRAPPIST-1.

PRINCIPAL PUBLICATIONS ON THE SYSTEM

VARIABLE PRESS ANNOUNCEMENTS
NASA - 2016-Feb-23: At least seven planets orbit TRAPPIST-1.
ESO - 2017-Feb-23: At least seven planets orbit TRAPPIST-1.
NASA - 2016-July-20: First atmospheric study on TRAPPIST-1b & 1c.
ESO - 2016-May-02: The first planets are identified in TRAPPIST-1.

BAS Calendar
(check www.brevardastro.org for more info)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>More Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/11</td>
<td>Full Moon</td>
<td></td>
</tr>
<tr>
<td>4/19</td>
<td>BAS Monthly Meeting</td>
<td>1519 Clearlake Rd. Cocoa, FL 32922 (EFSC Planetarium)</td>
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<tr>
<td>4/22-23</td>
<td>Lyrids Meteor Shower</td>
<td></td>
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<tr>
<td>4/26</td>
<td>New Moon</td>
<td></td>
</tr>
<tr>
<td>4/29</td>
<td>Astronomy Day at the Eastern Florida State College Planetarium - Cocoa.</td>
<td>Setup 5pm or earlier if you want to do some solar observing.</td>
</tr>
</tbody>
</table>
1 The moon passes 0.3° north of Aldebaran, 5 A.M. EDT
Mercury is at greatest eastern elongation (19°), 6 A.M. EDT
3 First Quarter Moon occurs at 2:39 P.M. EDT
6 Saturn is stationary, 1 A.M. EDT
7 The Moon passes 0.7° south of Regulus, 1 A.M. EDT
Jupiter is at opposition, 6 P.M. EDT
7 Jupiter reaches its 2017 peak today, shining at magnitude -2.5 and appearing 44.3” across through a telescope.
9 Mercury is stationary, 9 P.M. EDT
10 Moon passes 2° north of Jupiter, 5 P.M. EDT
11 Full Moon occurs at 2:08 A.M. EDT
12 Venus is stationary, 8 P.M. EDT
14 Uranus is in conjunction with the Sun, 2 A.M. EDT
15 The Moon is at apogee (251,950 miles from Earth, 6:05 A.M. EDT
16 The Moon passes 3° north of Saturn, 2 P.M. EDT
19 Last Quarter Moon, 5:57 A.M. EDT
20 Mercury is in inferior conjunction, 2 A.M. EDT
21 Pluto is stationary, 5 P.M. EDT
22 Lyrid meteor shower peaks
   The Moon passes 0.8° south of Neptune, 4 P.M. EDT
23 The Moon passes 5° south of Venus, 2 P.M. EDT
24 The Moon passes 0.8” north of asteroid Pallas, noon EDT
26 New Moon occurs at 8:16 A.M. EDT
27 The Moon is at perigee (223,275 miles from Earth) 12:15 P.M. EDT
28 The Moon passes 6° south of Mars, 4 A.M. EDT
29 Venus is at greatest brilliancy (magnitude -4.7), 5 P.M. EDT

Events from Astronomy April 2017 edition.