



ASTROFILES

Auburn Astronomical Society Newsletter

January 2019

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Moon Phases

January 21 — Full Moon
January 27 — 3rd Quarter
February 4 — New Moon
February 12 — 1st Quarter
February 19 — Full Moon
February 26 — 3rd Quarter
March 6 — New Moon
March 14 — 1st Quarter

Next AAS Meeting

The next scheduled AAS meeting will be Friday, February 1, 2019 in Auburn at our usual meeting location, Room 2015 of Davis Hall (Aerospace Engineering) on the AU Campus. 7:45 PM CT. Meeting reminders will be sent to all members in advance of the meeting

It's Time for 2019 AAS Dues!

It's that time again! Annual dues for membership in the AAS are now due. Our dues cycle runs from January 1 to December 31. Annual dues are \$20 and can be paid at the February 1 club meeting or by mail. Please refer to the application at the end of this newsletter for details and the address for mailing your dues. Your membership helps support the club and it's activities and as an extra benefit you are enrolled as a member of the Astronomical League, the national organization of astronomy clubs. They publish a nice quarterly publication, "The Reflector," which you will also receive.

Stay in touch with us



<http://www.auburnastro.org>



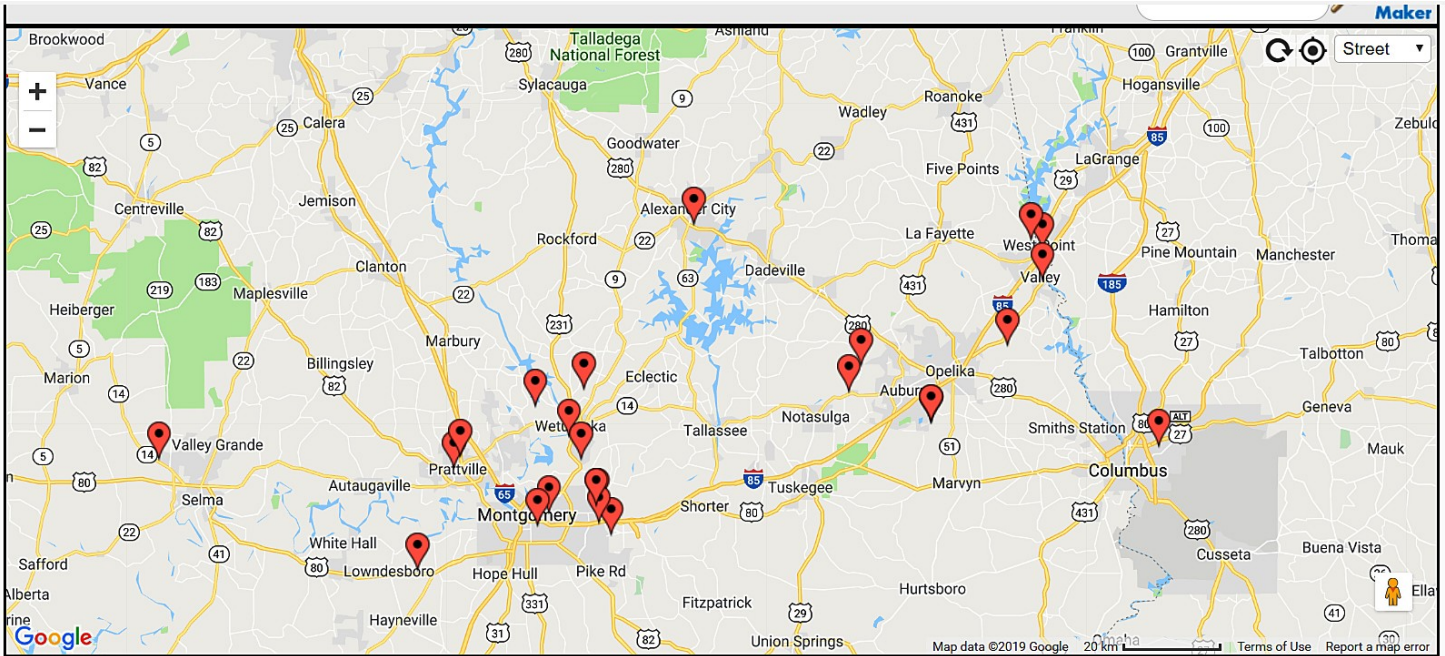
<https://www.facebook.com/groups/79864233515/>

Don't Forget the Lunar Eclipse!



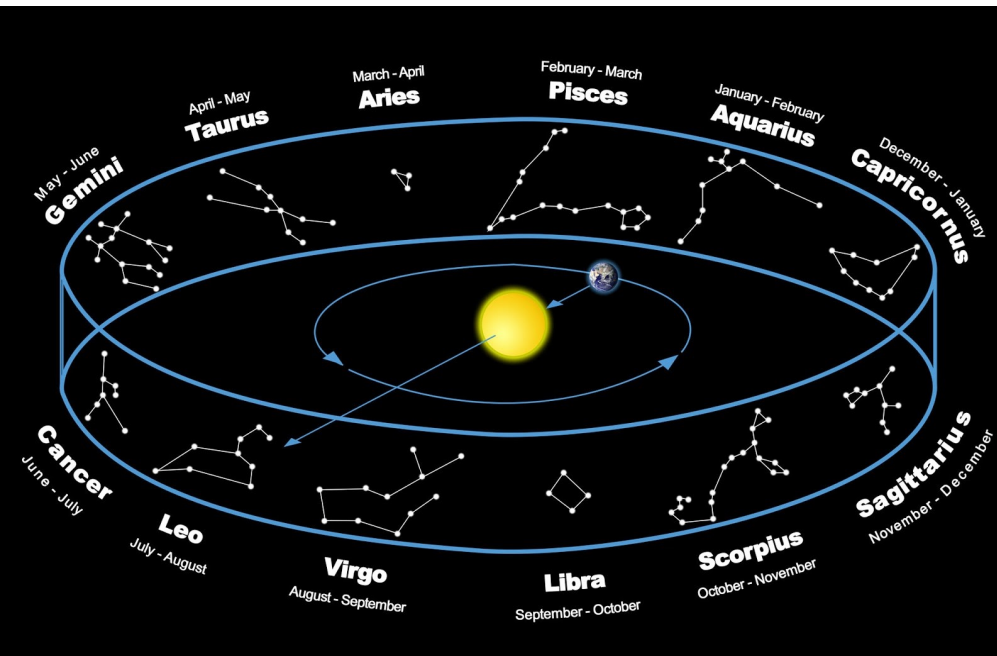
Don't forget the lunar eclipse on the evening of January 21st. This should be a good one as it is ideally placed for viewers in North America. For details, please refer to last month's issue of Astrofiles. And keep your fingers crossed for good weather!

Where are we? Auburn Astronomical Society members, that is. Despite having the word “Auburn” in our name, most of our members don’t live there. Below is a map that shows the locations of our current members.



What is the Zodiac?

No, we’re not going to talk about that other word...*astrology*. Simply stated, as we go through the yearly progression of seasons, from our vantage point here on Earth, the Sun, Moon and planets appear follow a predictable path through the sky. This path is known as the *ecliptic*. There are twelve constellations along this path and collectively they are known as the *zodiac*. The zodiac is a narrow strip of the sky spanning approxima



tely + or - 23 degrees from the celestial equator. The Sun, Moon and planets will all appear to travel within this narrow strip as they move through the sky over the course of the year. For example, currently the Sun is located in the area of the sky around the constellations of Capricornus and Aquarius before it slowly moves into Pisces and then Aries.

To Ultima Thule...and beyond!

After its historic flyby of Pluto in July of 2015, the New Horizons spacecraft was given a new target well beyond Pluto in the Kuiper belt, a distant area of mostly tiny objects that scientists believe represent materials that have remained basically unchanged since the formation of the solar system. For the next 3 1/2 years it continued on its journey until it finally encountered its next target—a tiny and obscure object that scientists named *Ultima-Thule*. Very little was known about Ultima-Thule, but through a series of carefully-timed occultations with other stars, it was believed to be somewhat elongated. As the photo to the right shows, it is not only elongated, but consists of two formerly separate bodies that have come together over time to form what is known as a *contact binary*. It is believed that most of the planets began their formation in this way. More and better photos and other information about Ultima-Thule will come, but the spacecraft is so far from the Earth that it could take up to 20 months to get all of the data retrieved.



Early New Horizons photo of Ultima-Thule during flyby on January 1, 2019.

New Horizons spacecraft being checked out in clean room prior to launch





Auburn Astronomical Society Membership Application Form

Name:

Address:

City: _____ State: _____ Zip: _____

Phone: _____ Date of Application* ____/____/____

E-mail:

Telescope(s):

Area(s) of special interest:

Enclose: \$20.00 for regular membership, payable in January. *Full-Time* student membership is half the Regular rate.

If you are a NEW member joining after the first of the year, refer to the prorated table below

Jan \$20.00	Feb \$18.33	Mar \$16.66	Apr \$14.99	May \$13.33	Jun \$11.66
Jul \$10.00	Aug \$8.33	Sep \$6.66	Oct \$4.99	Nov \$2.33	Dec \$1.66

Make checks payable to: Auburn Astronomical Society and return this application to:

Auburn Astronomical Society
c/o John Wingard, Secretary/Treasurer
#5 Wexton Court
Columbus, GA 31907

For questions about your dues or membership status, contact: jwin1048@gmail.com

Thank you for supporting the Auburn Astronomical Society!