

# Please join us for the dedication of The Howard Astronomical League Observatory at Alpha Ridge Park



**Saturday, July 25, 7:30 p.m.**  
11685 Old Frederick Road, Marriottsville

Family activities begin at 7:00 p.m.

Create a craft, see rocks from outer space, and view the sky through members' telescopes. Enjoy a model solar system walk from the Sun to Pluto and back. Bring your flashlights to have red filters attached for better night vision. Enjoy telescopic views of the Moon, Jupiter, Venus, and more through the Paul S. Watson Telescope.

Bring lawn chairs and blankets and enjoy an evening under the stars!

Information: <http://howardastro.org>



# Howard Astronomical League



July 16<sup>th</sup>, 2015

# Introductions

Name and what is your best  
telescope right now?



# Upcoming club activities

# Star Parties and public outreach!

Members Only

July 18

Grand Opening Take 2

July 25

Mason-Dixon Star Party

July 15 - 19

Almost Heaven Star Party

August 14 – 18

Stellafane

August 13 - 16

**Thank you!**  
**Mike Pittard** for  
the suggesting  
the observatory  
name!





**Member's  
astrophotos and  
sketches**

# Herman Heyn



# Herman Heyn



VENUS-JUPITER SYZIGY 07/02/15. A passerby tried to hog photo! Taken from my Baltimore front yard. Canon PowerShot on tripod.

**Chris Miskiewicz**



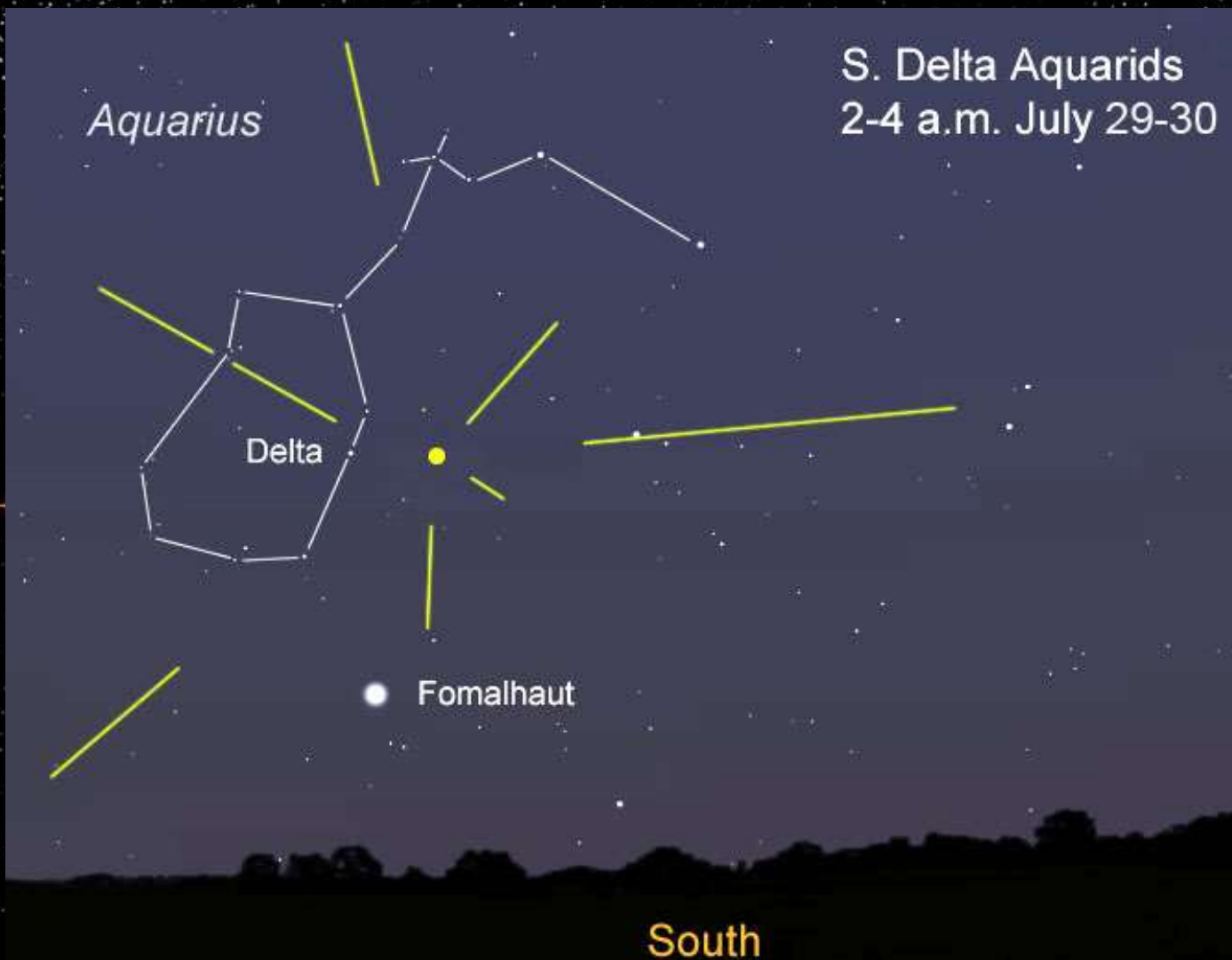


**Suggested  
Observing  
Meteor Showers**

## Delta Aquariid

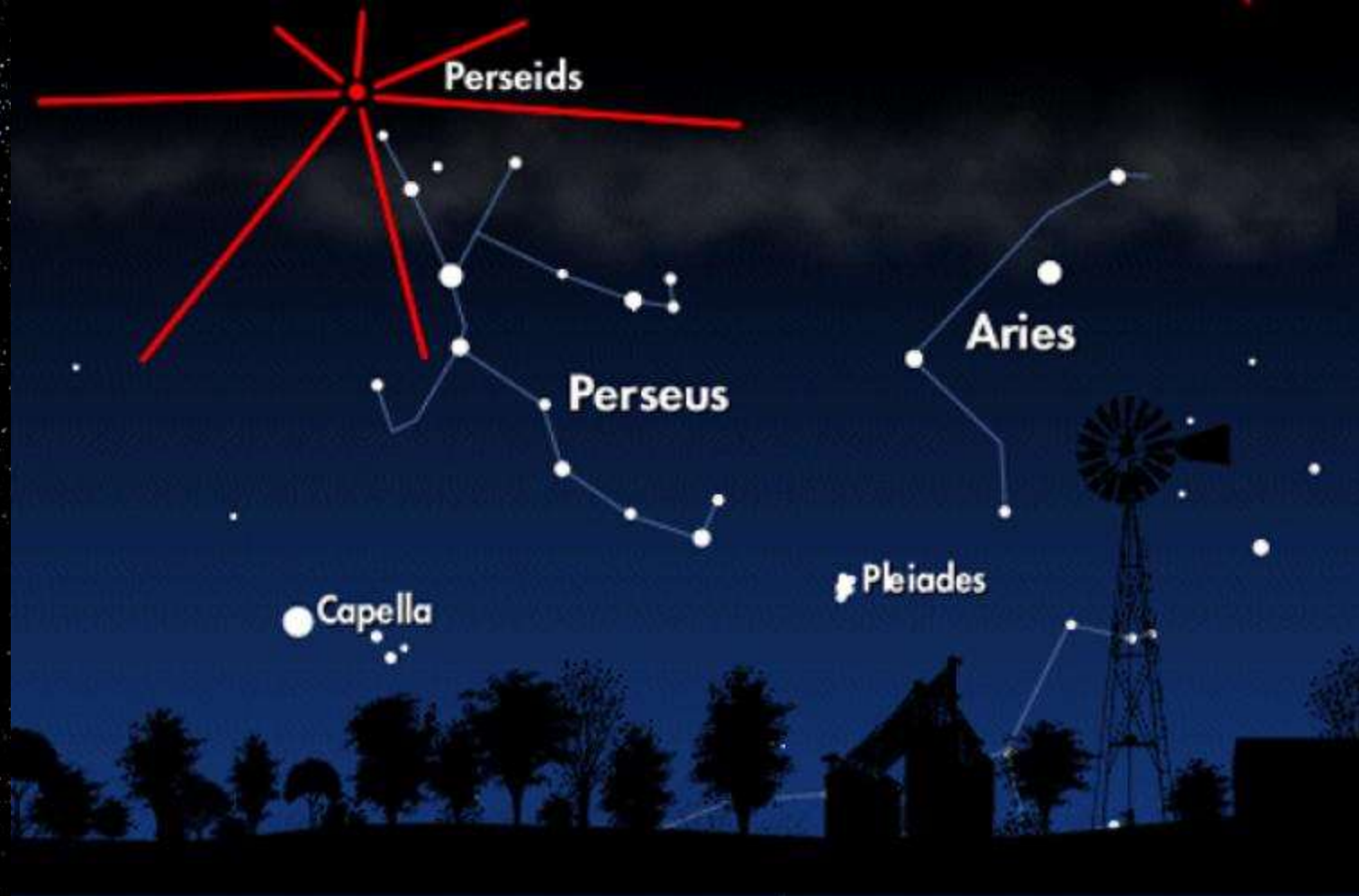
Officially active from July 12 - August 23 but late July under moon less conditions offer the best chances to observe.

Best Night July 29 about 20 an hour from the southern radiant of Aquarius.



## Perseids

Officially from July 17 – August 24 but early to mid August will give the best show.  
Best nights August 9 – 13 depending on the moon but before dawn might be the best time to observe.



**Introducing...**

**Ernie Wright**

**Apollo 8**

**Earthrise**

# Gravity Well

Now with Spandex

# Spandex Gravity Well

## Supplies

- -Tent poles or something to make a circular round frame that can break down
- -Binder Clips
- -Spandex large enough for your frame
- -Marbles, things that roll of various sizes and weights
- -A setup area with chair(make a good standing height)
- -Heavy item for center mass

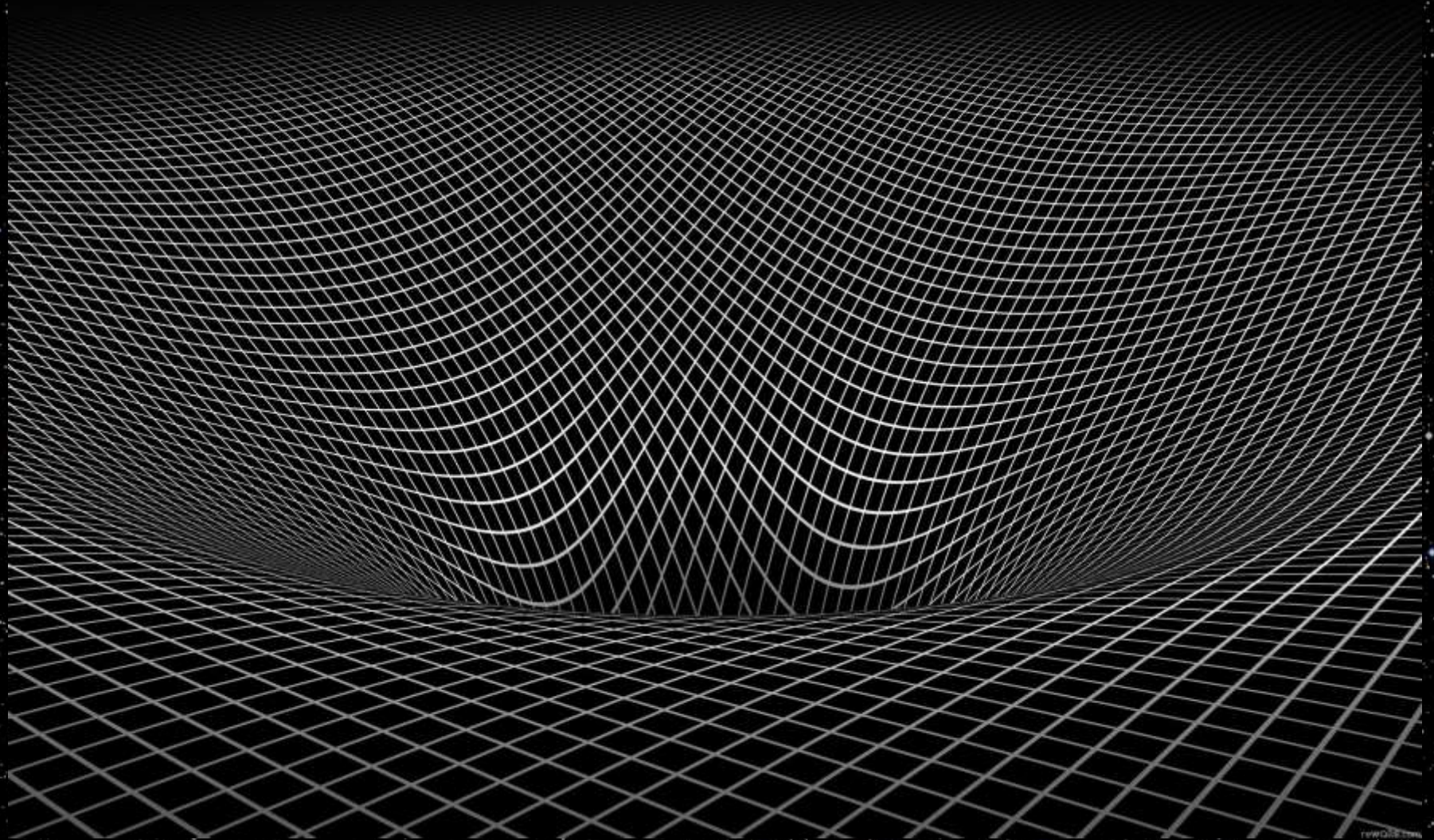
# Setup



# Spandex Gravity Well



# The fabric of space

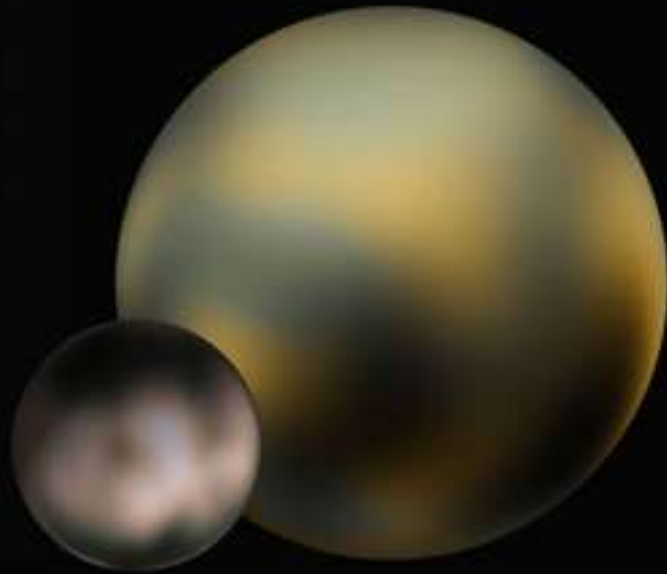


# Great tool for outreach!



Next time...

# Pluto



BEFORE



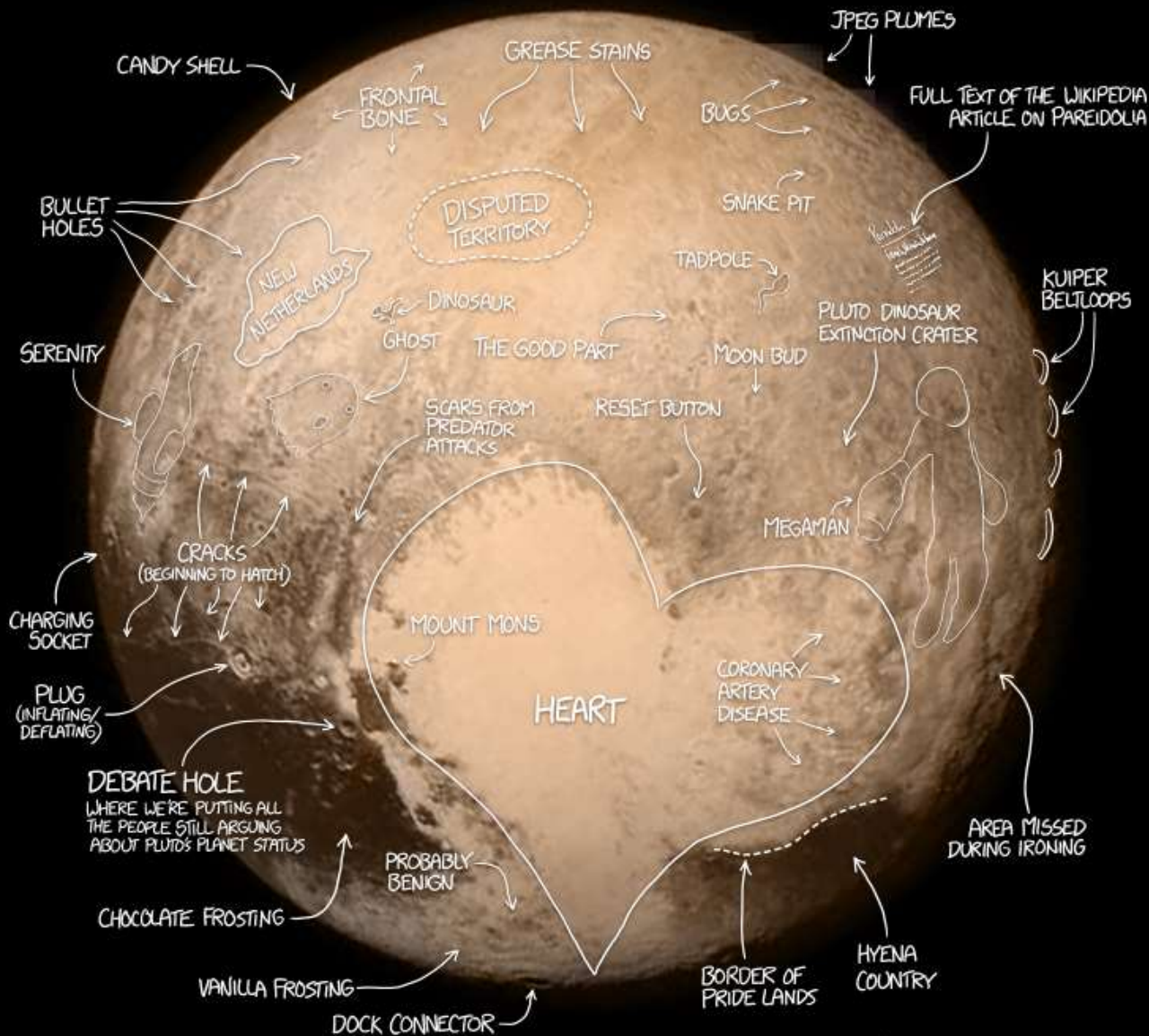
AFTER

# Pluto's Rocky Mountains



# PLUTO

SOME OF THE FEATURES ALREADY IDENTIFIED IN TODAY'S NEW HORIZONS IMAGE



**Thank You!**

**Next month's planning meeting is on  
Monday, August 3, 2015**

**@ 7:00 PM**

**The general monthly meeting is on  
August 20, 2015**

**@ 7:00 PM**

**Meeting theme:**

**New Horizon's Mission and Pluto**