



Volume 41 – Number 3

Summer 2025

Message from our Society's President, , Wayne (Skip) Bird

Howdy and Welcome to Wayne's World,

AAAHHHH the summer time approaches. The time of short nights, mosquitoes, DEW, picnics, star parties and mass quantities of outreach events. As I write this our club has grown to over 200 members (Thanks not to me but Laurie tireless efforts, can you believe how modest I am?). Most of these new members came not from knocking on doors or random searches of the internet but from Outreach events. I was told to keep this letter shorter then the last one, so I will not go into thanking ALL those people who have stepped up and are running repeating events and who continually volunteer to help out and who love sharing their passion for Astronomy with others and who know that if we don't do this our club like so many others will just die from entropy (look it up) and who help find the people who want to look up (again our club motto) instead of looking down (at phone) and who ask "Gosh is there something I can do?" and this is easier then I thought and so much more fun than bingeing Tiger King (again look it up, and if you know what I'm talking about shame on you) and is there a record for run-on sentences or how many "and's" used in one sentence. This way the article is the same length but has fewer sentences. I will keep this short so here are just some of the outreach events coming up over the summer. If you got the urge to help or I have guilted you into volunteering please contact any of these people to ask how you can help. If we get enough people to help them I will not have to institute the draft or press gangs (look it up, next time I'll just include a link to a dictionary). Please, Please, Please, Please, Please, Please, Please, Please, Please, Please help out.

Just think, my Tyranny will soon be over because I will have reached my term limit, AND someone else can Ramble On...

Annual Picnic!

August 16 is our annual picnic at BBNC. We've reserved the new pavilion outside of the observatory. It has power on each pole, light and a fan. We will go from festivities to a star party, weather permitting, and the moon rises late with the last quarter.

To sign up for the potluck (or suffer the wrath of 12 mac & cheese variations), click on this link (<https://westminsterastro.groups.io/g/main/table?id=37370>), logging into our groups.io to access the database, and click "add row" to fill in the form.

We Want to Hear From You!

Have a question about any aspect of astronomy? Let us know. We'll address these at the membership meetings. Questions could be about observing, telescopes, astrophotography, astrophysics, stellar evolution, newbie questions (*there are no dumb questions*), and pretty much anything about astronomy. Send your questions to WASI's Secretary at secretary@westminsterastro.org. Let us know if you'd prefer to be anonymous.

Would you like to give a short presentation at the membership meetings? These could be anything from a minute to ten minutes. Tell us what you're doing, or give insight into some aspect of this hobby. These will be after the mid-meeting break. Send your ideas to the Secretary.

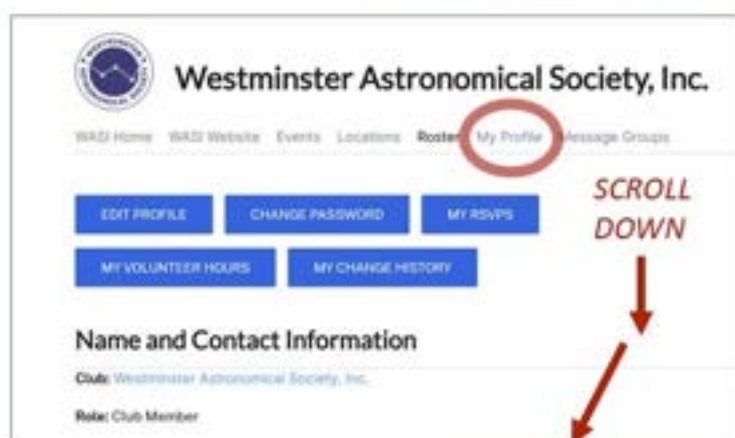
We're hoping to hold semi-regular "special interest" sessions. These will be at Bear Branch outside of the regular membership meetings. The April session on DIY Monitoring of Space Weather was well received. Have any ideas for a session you'd be interested in attending—or giving? Send them to the Secretary.

Renewing Your WASI Membership

Is it time to renew your membership? Check your membership card as shown below. To renew, go to <https://www.westminsterastro.org/join-wasi/>.

When are my membership dues due?

- Check top of your membership card
- OR
- Check Night Sky Network: <https://nightsky.jpl.nasa.gov/> (log on)



Westminster Astronomical Society, Inc.

WASI Home WASI Website Events Locations Roster **My Profile** Message Groups

EDIT PROFILE CHANGE PASSWORD MY RSVPs

MY VOLUNTEER HOURS MY CHANGE HISTORY

Name and Contact Information

Club: Westminster Astronomical Society, Inc.

Role: Club Member



Membership Details

Club Job(s):

Club Join Date:

★ Last Paid Amount: \$1.00

Last Paid Date:

Membership Paid Through: June 30, 2025 ★

WASI News

WASI member Steve Conard was one of the discoverers of what appears to be a satellite of the main-belt asteroid 134421. He did this using an occultation of the star TYC 2765-00218-1 in October. A diagram is here http://www.cbat.eps.harvard.edu/iau/cbet/005500/CBET5556_Fig1.png; and light curves are here: http://www.cbat.eps.harvard.edu/iau/cbet/005500/CBET5556_Fig2.png. Real science!

Profile of WASI Officers

Want to know more about our officers? Here are bios of some of the officers.

Skip Bird, President: Wayne "Skip" Bird is a NASA Heliophysics Ambassador, and presently the Outreach Director/Night Sky Network Guru for the Westminster Astronomical Society, an outreach fanatic (definition of fanatic: someone who will not change his mind AND will not change the subject). He is also a "MAD" Science teacher for TGIF a home school group. He is the world-renowned author of "Night Flying Astronomy Bird" articles (OK, maybe world-renowned is being a little modest), and the World's Greatest Dad -- he has the button to prove it, but enough about me.

Laurie Anson, Treasurer: Laurie is a life-long star gazer and photographer, life member of both the Astronomical League (AL) and Girl Scouts USA, NASA partner in programs: Girl Scouts & Eclipse Stars, Solar System & Eclipse Ambassadors, and Treasurer/ALCOR for Westminster Astronomical Society, Inc. She enjoys completing AL observing programs and challenges, and outreach with smart scopes. Laurie also regularly appears on the Global Star Party for the AL. *Contact for Treasury & Membership questions:* Treasurer@WestminsterAstro.org

James Reynolds, Board Member: James Reynolds is the Planetarium Director of the Khan Planetarium which is part of the School of Science, Aviation, Health and Technology at Elizabeth City State University (ECSU), Elizabeth City, North Carolina.

James served as backup planetarium operator at both Towson University and the Community College of Baltimore County, Catonsville. Prior to arriving in Elizabeth City, he was the Planetarium Director at Bear Branch Nature Center in Westminister, Maryland.

While living in Maryland, James worked extensively with Baltimore County, Baltimore City, & Montgomery County, Maryland school primary and secondary Title IX school systems providing STEM related public outreach. As Towson University's Project ASTRO Outreach Facilitator, he recruited astronomers & teachers, particularly Baltimore County Public School educators to the PROJECT ASTRO program and organized the annual partner workshop at the Maryland Science Center in Baltimore. James was recognized annually by NASA for his public outreach efforts and was the 2014 Carroll County Parks and Recreation "Volunteer of the Year".

Brooke Parkhurst, 2nd Vice President: Brooke received a degree in Botany from University of Maryland, College Park, but left academia to be a professional musician. After traveling the US playing Irish music she settled down as a pastry chef in several fine dining restaurants in Rappahannock County, Va, as well as owning a successful gluten free bakery. Having now moved back to Maryland, she has had the luxury of pursuing her interest in astronomy.

Al Ansorge, Planetarium Coordinator: In this role, Al works closely with our county partners at Bear Branch to schedule monthly shows, maintain the equipment, and find exciting content for the shows.

He is married to your treasurer, and can be found at several of the public outreach events held each year by both WASI and the Tri State Astronomy clubs (which happens to meet in the Hagerstown planetarium).

His introduction to the night sky was while learning celestial navigation, And he maintains a keen interest in navigation principles and techniques through the ages, from the time of the Hindu explorers, the Phoenicians, the Romans, the Vikings, and the Europeans, with a favorite being the Polynesian wayfinders.

Pankaj 'Doc' Desai, Board Member: Interest in astronomy began at a very early age when I started helping my grandfather in Bombay, India, where he would grind his own mirrors and build his own Newtonian telescopes. The largest was an 8" Dob. He also was able to build a home projecting planetarium by drilling holes through a black hard plastic ball, inserting a light bulb, and fascinated the children in the neighborhood with doing shows in his large living room.

Many years later, I took up the hobby, mainly doing visual astronomy, then progressed to purchasing a 6" Celestron Go-To scope. Now use the ZWO Seestar 50 Smart Telescope that has opened up a whole new world, usually reserved for astrophotographers!

Served as Director of the Planetarium and is a Board Member of WASI, help contact astronomers around the country and the world to address our Club members for the monthly meetings. Currently busy in private medical practice full time, teaching Residents in Internal Medicine, helping and guiding young pre-med college students, attempting to play golf (doing it badly!). For the past several months enjoying being a grandparent!

Curtis Roelle, Board Member and Librarian: Curt was hooked on space as a pre-schooler watching live lift-offs of project Mercury astronauts on black and white TV. He joined his first astronomy club at age 14 with a 60mm refractor originally from Santa Claus. After graduating college, he left Nebraska and headed east to Maryland. Curt assembled a 12.5" Equatorial Newtonian telescope and, looking for darker skies, relocated to the Westminster area where, in 1984, he became one of the first five members to organize and join the Westminster Astronomical Society, of Maryland. Since then he has enjoyed making friends with a host of marvelous people who share an interest in astronomy.

Curt is thankful for the efforts of our outstanding club members under whose supervision two wonderful facilities were established and maintained at Bear Branch Nature Center– the planetarium and the Blaine F. Roelke Memorial Observatory. The continuously expanding membership of the club is a constant source of pride for Curt.

Jack Ganssle, Secretary: Jack is a retired electronics engineer who specialized in embedded systems. His primary interests in astronomy are astrophotography, deep dives into the science, and radio astronomy. He and his lovely wife Marybeth recently became grandparents, rather baffling as he's pretty sure he's still in high school. You can reach him at secretary@westminsterastro.org.

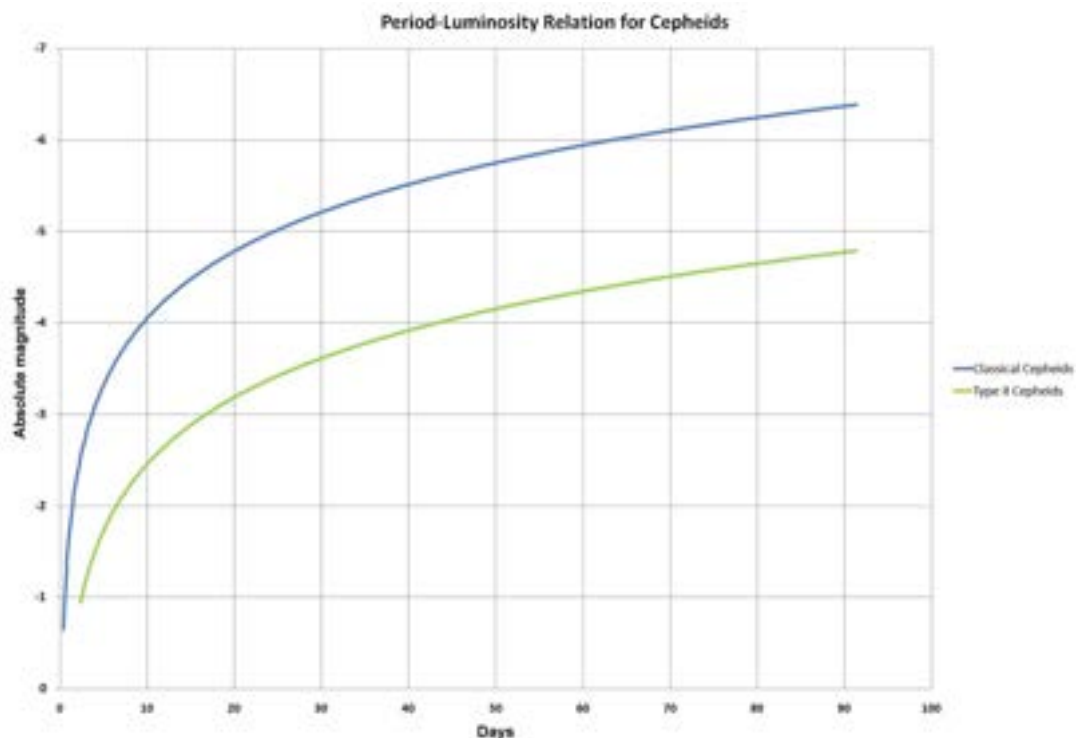
Back to Basics—The Hubble Tension

Our universe is swarming with galaxies, hundreds of billions, perhaps even trillions. No one really knows how many. But a single lifetime ago it was thought the Milky Way comprised the whole universe.

People knew there were strange things out there. Charles Messier, for instance, compiled a list of objects that clearly weren't stars, and, as a comet hunter, that were not targets he was interested in. Many of those are our favorites: M51, the Whirlpool Galaxy, M101, the Pinwheel Galaxy. But in his time (late 18th century) these were thought to be gas clouds of some sort. They were called “nebula”, clumped in with objects like M16 which today still have that moniker.

Over time a few started to question this assumption, culminating in “The Great Debate”, as it's now known, in 1920 between Harlow Shapley and Heber Curtis. Shapley believed these nebula were all local to the Milky Way; Curtis disagreed, thinking that objects like Andromeda were, in his words, “island universes.” Shapley's arguments were pretty weak, and it's thought he was mostly interested in impressing representatives from Harvard where he hoped (and succeeded) to find work.

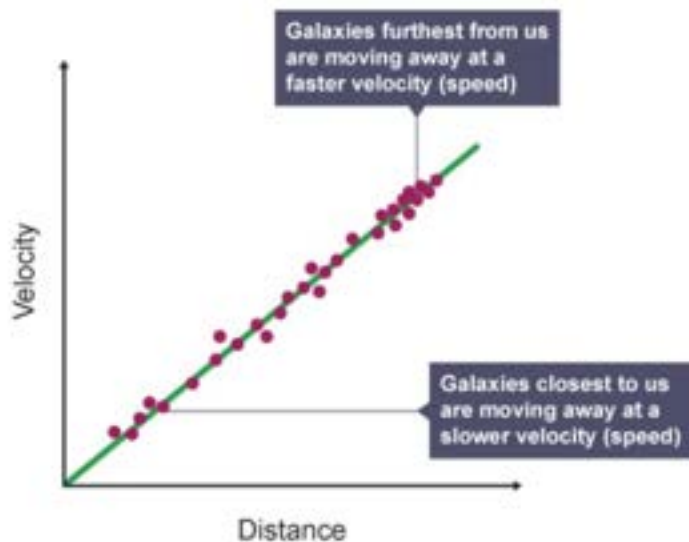
Just a few years later Edwin Hubble found Cepheid stars in objects like the Andromeda “nebula”. Henrietta Swan Leavitt had deduced that Cepheids are variables whose period is proportional to their brightness; using this relation Hubble realized that Andromeda was too far away to be a part of our galaxy. The Milky Way is about 100,000 light years in diameter; Andromeda is 20 times further away.



Graph showing how brighter Cepheid variable stars have longer periods.

Back to Basics—Continued

But Hubble found more than this. Not only are these galaxies very distant, it turns out that the further they are from us, the faster they're speeding away.



This is a puzzling result—why does it seem the Earth is repelling the entire universe?

The universe is expanding. No matter where you are, here or on some distant alien landscape a billion light years away, galaxies will be speeding away from you. It's like living on the surface of a balloon that is being inflated; all points recede from each other, and more distant galaxies gallop away faster than those closer. The "Hubble Constant" tells us just how fast things recede.

$V = H_0 D$, where V is velocity of a distant galaxy, H_0 is the Hubble constant, and D is how far away that galaxy is. H_0 is measured in kilometers per second per megaparsec, where a megaparsec is one million parsecs, one parsec being about 3.26 light years.

Hubble thought his constant was about 500 km/s/mpc, way faster than current estimates. Today's studies of Cepheid variables and (especially for very distant galaxies) type Ia supernovas pegs the constant at about 74 km/s/mpc.

But there are other sources of insight into the size of H_0 . The cosmic microwave background radiation is the leftover glow from the big bang; it's what the universe looked like 380,000 years after its birth. Analysis of that suggests H_0 is more like 67 km/s/mpc.

Which answer is right? No one knows, and this is one of the great mysteries in astronomy. It's called the "Hubble Tension" and is being investigated vigorously.

Even more puzzling, it seems the Hubble constant isn't, well, constant. In the past it may have had a different value. Yes, the universe is expanding, but something happened 7 billion years ago to accelerate that expansion. The term "dark energy" describes some force that drives this acceleration, but "dark energy" is just a placeholder phrase that means "no one has a clue." Another great mystery. And another reason that astronomy is an exciting subject to be engaged with today!

Astrophotos From Our Members

Laurie Ansorge sent a number of pictures taken with her Celestron Origin.



M81, AKA Bode's Galaxy in Ursa Major.



The Iris Nebula in Cepheus. Nice detail on the nebulosity.

Astrophotos From Our Members



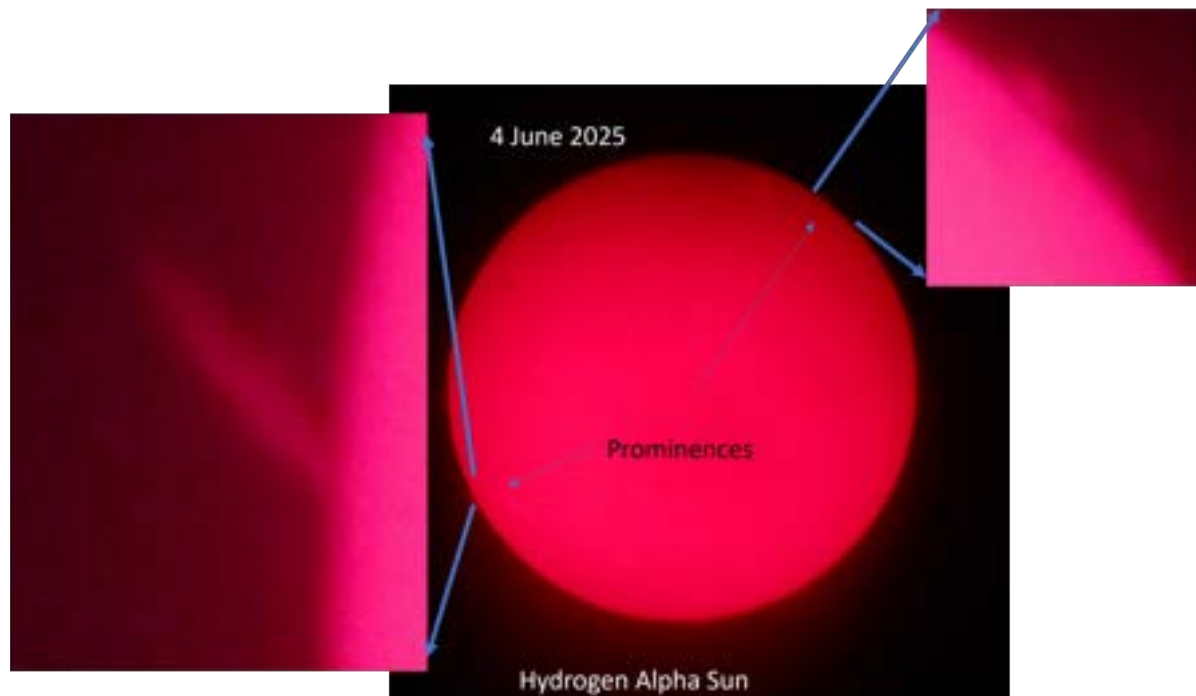
Laurie's stunning Rosette Nebula.



NGC 4567 and NGC 4568, the Butterfly Galaxies, are interacting galaxies in Virgo.

Astrophotos From Our Members

Jeff Kretsch took these through a Coronado PST (Personal Solar Telescope) with a hand-held point and shoot camera. The sun has been pretty active so this is a great time to be doing solar observations.



Jeff also sent this: I took this year while on a walk. It is of a rare circumhorizontal arc, seen only in the summer when the sun is over 62 degrees high.



Astrophotos From Our Members

Chris Walters sent this picture of M51 from Memorial Day weekend. This is a 3-minute exposure using Sony A7S on an Apertura 75 telescope.



Dave Weisman had some nice submissions:



Astrophotos From Our Members

Here's two more from Dave Weisman:



WASI FAQs

Library - Did you know we have over 700 books about astronomy in our WASI library? There are available to WASI members. Here's the complete card catalog: <https://westminsterastro.groups.io/g/main/files>.

Loaner telescopes - We also have a telescope lending library. If you'd like to borrow a scope, talk to Curt Roelle.

Astronomical League - All WASI members are also members of the Astronomical League. Check out their 80+ observing programs, many of which come with awards: <https://www.astroleague.org/>

Newsletter - Please send pictures, articles, and ideas for the newsletter to jack@ganssle.com.

Facebook - We're active and sharing images on our Facebook page, found here:



Join/Renew membership link: <https://www.westminsterastro.org/join-wasi/>

If you've already entered your contact information (renewing), skip the "database" link: <https://paypal.me/WAstroSInc>

Dues are payable via PayPal on the link above, by check or cash (and through your bank's on-line bill payment). Membership Dues are \$25/year for individuals or family, and youth under 18 is \$5/year.

- On time payment means eligibility for the annual incentive .
- Keep access to the members-only groups.io pages/information
- Receive members-only access/notifications on Night Sky Network
- Keep/get discount rates for popular astronomy magazines
- Borrow from the WASI scope/literature library

Files and club member correspondence & wiki links are found here: <https://westminsterastro.groups.io/g/main>. Remember to set your communication preferences.

Outreach/event calendar is found on: <https://nightsky.jpl.nasa.gov/index.cfm>. Set your communication preferences here as well.

Changed address, email or phone? Please update your information and send a message to the web-master and/or treasurer@westminsterastro.org.

We meet monthly on the 2nd Wednesday of the month:
Back to Basics from 7:15 PM – 7:30PM; General Meeting 7:30PM – 9:30PM
Bear Branch Nature Center Carroll County; 300 John Owings Rd.; Westminster, MD 21158
Website: <https://www.westminsterastro.org/> (Zoom info for hybrid meetings)