BBAA Minutes (October 2025 Monthly Meeting)

Date: 10/02/2025 @TCC VA Beach Science Building

In attendance: Richard Thiemann, Joseph Brown, Gabriel Dandrade, Jeremy Mitchell, Jonathan Scheetz, Irene Schindler, Kent Blackwell, Jeff Edmondson, Sylvio Canu, Kirt Kerr, Barry Bryant, Ed Marciano, Andrew Kok, Nolan Kan, Will Kiff, Matt McLaughlin, Shawn Loescher, Mark Johnson, Patrick Vartuli, Bill Rust, James Sorenson, Jeff Goldstein. **On Zoom:** Rich Roberts, Kevin Brooks, Jeff Thornton, Mark Wilson, Roland Downing, Bruce Powers, Dr. Mike Zevin, David Fontanyl, Ethan (no last name), Sandy Paxson.

7:31 pm: The BBAA October 2025 meeting was called to order by Jeremy Mitchell.

Coffee and refreshments are available anytime during the meeting. George was not here, but Jeremy delivered the spiel tonight.

Before official reports, Richard Thiemann gave a brief introduction on the topic for tonight's special guest: gravitational waves. The guest speaker went first tonight.

Special Program: Gravitational Waves (Dr. Mike Zevin): 7:35 pm.

-Dr. Zevin is planetarium director of the Adler Planetarium in Chicago and a former UF professor. He specializes in hunting gravitational waves and phenomena pertaining to relativity and Einstein's theories. This involves a lot of black hole research, which is tricky since black holes do not emit any light, meaning they must be found through indirect means in most cases. Until recently, X-ray binaries or quasars were the typical means by which black holes were "found," until 2019, when Virgo A (M87's) black hole was imaged directly. Gravitational waves allow for much more involved observations of black holes, through Einstein's theory of general relativity. One byproduct of relativity are gravitational waves, which propagate through space/time at lightspeed. They wouldn't be officially confirmed until LIGO (Laser Interferometer Gravitational-wave Observatory) was built in Louisiana. These observatories use very powerful lasers to detect extremely small distance changes due to space/time deforming, as small as 10^-18 meters. The first signals were heard on September 14th, 2015, from a merging pair of black holes about 1 billion light years away. Since then, merging neutron stars and black holes have become prime targets for LIGO observing. Since 2015, the number of known black holes and neutron stars has grown rapidly, and as LIGO observing gets more sensitive, more cosmic events are likely to enter range of detection, as its based on frequency of orbital periods, rather than flux as with light-based observing.

REPORTS:

VP Report (Jeff Goldstein): 8:40 pm.

Calendar of events for October:

-KVRC Astro 101 (Oct 1st @8:00 pm),

-Club Meeting (Oct 2nd @7:30 pm).

-International Observe the Moon Night (Oct 4th @6:00 pm).

-Science in Sci-fi (Oct 9th @6:00 pm).

-Reign in Science (Oct 11th @10:00 am).

-Cornwatch (Oct 17th and Oct 23rd @sunset).

-Harvest Festival (Oct 18th @10:00 am).

-Skywatch (Oct 18th @ 6:30 pm).

-Staunton River Star Party (Oct 20th-26th).

-Nightwatch (Oct 15th @6:00 pm).

-Garden Stars (Oct 28th @7:30 pm).

-Astronomy by the River (Oct 29th @7:15 pm).

-Rooftop Astronomy (Oct 30th @7:30 pm).

Calendar of events for November: Was waived due to time issues.

Treasurer's Report (Rich Roberts): 8:49 pm

-Finances are looking good, even with some small losses from ECSP and some other club purchases like the hot dog machine and giant flag.

-Three new members since last meeting for 197 total.

-ECSP had a net positive intake of money (even if it was only $11).

-Treasurer's Report was accepted at 8:51 pm.

Secretary's Report (Gabriel Dandrade): 7:45 pm

-The presentation on deep space communication and JPL was the only highlight of last meeting.

-Minutes were accepted at 8:52 pm.

ALCOR Report and East Coast Star Party (Bruce Powers): 8:52 pm.

-International Observe the Moon night is coming up October 4th.

-A special challenge is underway to observe certain features of the Moon between October 2nd and 11th. There's also one for T Corona Borealis, but it'll have to wait for a couple months.

-ECSP was a great event this past September.

Scholarship Committee (Ben Loyola): Nothing to report right now.

Nominating Committee (Jeremy Mitchell): Was skipped due to time.

-Elections are coming up in November. Treasurer and Vice President positions are available for anyone who's interested.

Old Business: 8:55 pm.

-Dew Heater workshop was beta-tested at ECSP. There is still the option to do another one for anyone who missed it, as there are extra materials available.

-The RASC's Handbook is available for a bulk buy option, with ten. We have enough people to take advantage of that option.

-International Observe the Moon Night will be happening at the boardwalk in Virginia Beach this year. Parking passes will be available, but we cannot park on the boardwalk this time.

-Hot dog machine was a smashing success.

New Business: 8:59 pm.

-Nothing to report this time.

Observing Reports: Nothing was reported tonight.

Next meeting is on November 6th, 2025.

Meeting was adjourned at **9:10 pm.**