

AAI Research Committee Report for April 2018

**Presentations have dominated our activities this month.**

**Solar system:** Clif Ashcraft has imaged the first quarter moon with an amazing number of craters, including 98 km diameter *Crater Sacrobosco* (John de Hollywood, an English mathematician 1200 – 1256 AD). This little face below Mare Tranquillitatis seems to be saying “Whoa” to me. What do you think?



Clif has also begun taking images of Jupiter as it glides higher in the sky toward opposition from the sun next month.

Jim Nordhausen has begun experimenting with higher magnifications with his 10” Dob, and is pleased with 400x on the Moon during daylight.

**Presentations:**

Dennis Conti spoke at NEAIC (North East Astro Imaging Conference) and at NEAF (North East Astronomy Forum) in Suffern, NY on “The Tess Exoplanet Mission and Amateur Astronomer Participation.”

I spoke at Astronomy Day at UACNJ on “Planets we Can See and Planets We Can’t See.”

For the Advanced QO course Stan Honda spoke on landscape astrophotography, Tony Sharfman spoke on DSLR astrophotography, and Bobby Marinov spoke on planetary imaging.

At NEAF we finally got all five of our *AAI co-authors* together from the KELT vetting false positives paper: Dennis Conti, Mary Lou West, Tolga Gumusayak, Clif Ashcraft, and Jim Nordhausen.



**Other:** Dennis attended the launch of the TESS (Transiting Exoplanet Survey Satellite)

spacecraft in Florida as a VIP. The Falcon rocket roared skyward on April 18 (postponed from April 16) in the first second of a 30 second launch window.

NEAF was a big success. Attendees included Clif, Jim, Tolga, Craig Balogh, Mary Ducca, John Kozimba, Steve Lowe, Stewart Meyers, Kathy Vaccari, Marcus Valdez, Al and Bonnie Witzgall, Mark Zdziarski, Aaron Zuckerman and others.

I organized NEAF’s Pro/Am collaboration session on Saturday from 9 to 5:30. There were eight talks by ten presenters: PANOPTES Project (Josh Walawender, Keck Observatory), Space Fab: the first app-controlled space telescope (Sean League, Spacefab), Exoplanet Masses by Microlensing (Aparna Bhattacharya, Goddard SFC), The TESS Exoplanet Mission and Amateur Astronomer Participation (Dennis

Conti), The Depth and Quality of 2017 Eclipse Observations (Mike Reynolds, Florida State University), Getting Started in Occultation Science for Amateurs (David Dunham, IOTA), Near Earth Asteroids (Kirsten Howley, Lawrence Livermore National Laboratory and Bob Stephens, AAVSO), Building a Public Observatory (Jim Cole and Stephen Riggs, Lowell Observatory).

Tolga and I were staff at NEAIC and met some very interesting people.

Clif reported that the GAIA Data Release 2 is now available on VizieR (<http://vizier.u-strasbg.fr/>) so you can look up the measured parallax (and calculate the distance) for a billion stars. This is probably more than you ever wanted to know.

*Respectfully submitted, Mary Lou West, Research Chair*