

Research Committee Report for February 2018

This year sad February had no full moon, and not much clear weather either.

Solar System: Stan Honda won another Astronomy Picture of the Day on Saturday February 17 with his composite of 22 images of the *Manhattan skyline* seen across the reservoir in Central Park with the International Space Station making a dashed line down from the upper right. See <https://apod.nasa.gov/> and look at the calendar for February.

Stars: I have proposed a project for Jack Cleeve (high school student QO) to observe tiny variations in the brightness of a hot star with a very strong magnetic field. This magnetism generates star spots and a spectrum with unusual abundances of the chemical elements. Steve Lowe will help Jack to take spectra.

Nebulae: Steve took a *spectrum of NGC 2174-75*, the Monkey Head Nebula which Helder Jacinto imaged last month. It shows the emission lines of a hot diffuse gas rather than absorption lines of stars. Steve also reports a useful list of supernovae at <http://www.supernova.thistlethwaites.com/supernova.html#2018pv>

Presentations: Helder Jacinto has an exhibit of his astrophotography until 3/29 in the Gallery in the Kenilworth Library, 548 Boulevard, Kenilworth, NJ 07033. You should go and admire his terrific work. Helder also gave a talk on "Narrowband Astrophotography" on Friday February 10 at Sperry.

Other: Aaron Zuckerman has organized a set of hands-on lessons we hope a lot of QOs take. They will be on Tuesday evenings from March 13 to June 5, and prepare people to do projects.

Aaron and Mark Zdziarski pointed out Elon Musk's February 6 launch of the Falcon Heavy rocket carrying *Starman in a red Tesla roadster*. Tolga Gumusayak

says that this is a brilliant advertising ploy as it is now listed in the solar system objects catalog. It rotates with a period of 4.7589 +/- .0060 minutes and can be observed as a variable star. LOL

Clif Ashcraft wrote a sky program for the COMMODORE 64 decades ago. See www.youtube.com/watch?v=TjogYuMdok4

Dennis Conti pointed out that President Trump's budget zeroed out the WFIRST spacecraft mission, so astronomers will need to lobby Congress hard this summer.

Respectfully submitted, Mary Lou West, Research Chair

