



Mid-Hudson Astronomical Association

April, 2018

Website: www.midhudsonastro.org

Yahoo Group: MHAstro

President : Jack Chastain
Secretary: Jim Rockrohr
Newsletter Editor: Rick Versace
Publicity: Paul Chauvet
Speakers: Paul Granich

Vice President: Paul Granich
Treasurer: Karen Tulchinsky
Membership Coordinator: Caryn Sobel
Webmaster: Paul Chauvet
Outreach: (open)
College Liaison: Dr. Amy Forestell

Board of Directors: Joe Macagne, Karl Loatman, Steve Carey, Willie Yee

(Editor's note: No meeting last month so no minutes. Republishing Decembers minutes)

Minutes of the monthly meeting of the Mid Hudson Astronomical Association, March 20, 2018

The meeting was called to order at 7:30 PM by President Jack Chastain in the Coykendal Auditorium at SUNY, New Paltz, NY.

The minutes of the February, 2017, meeting were approved as published in the newsletter.

Officer's Reports:

President: Jack has been working on transition documents and will distribute them for comments when ready. There are also some minor By-Law updates coming.

Membership: Caryn Sobel was not present. Dues of \$25 are due for 2018.

Treasurer: Karen Tulchinski was present. Current balance is \$2365.69, less \$117 for Paul Chauvet for MeetUp and PayPal renewals.

Publicity/ Webmaster: Paul Chauvet was present.

- Some discussion of MeetUp before the meeting officially started regarding cost of the service. Paul is open to suggestions for alternatives.

- Paul reminds everyone that he needs at least 1 month notice to properly publicize events due to newspaper and magazine publishing deadlines.

Outreach:

- We need someone to coordinate our outreach events and schedules. See Jack if interested.
- **Next Club Star Party:** April 13, 8 PM. Be sure to RSVP with car license plate number, make and model by the Thursday evening before the star party, even if there is only a remote chance that you will attend on Friday evening or Saturday, if postponed due to weather. It's better to have too many people on the list rather than someone who isn't registered.
- **Sam's Point Moon Viewing:** April 21
- **Bright Ideas:** April 28, High Meadows School, Stone Ridge: solar viewing. See Willie.
- **Girl Scout Camp:** May 19, Ulster County Fairgrounds. Several 'scopes needed. Rick coordinating(?).
- **Private Mohonk Event:** Ken Bailey is coordinating. Details TBD.
- **Paterson Library:** requesting 'scopes for sometime in August.
- **Possible Private Event:** at some TBD Lodge, willing to pay. August 13, 14, or 15. Jack coordinating.
- **Olana Events:** TBD
- **Walkway Events:** New organizational structure. Eric Myers is our representative. Expect invitations for May 12: "Jupiter", July 15: "Moon meets Venus", August 12: "Meteor Shower", September 7: "Neptune in Opposition". These are SEPARATE from the "Moon Walks". First of those is April 27.

Upcoming programs: The following information was shared:

- (None reported. See MeetUp for latest information.)

Old Business:

- The last Star party (March 13) was cold (26 degrees F at midnight). About 10 people and 5 'scopes. Windy early. Good sky until about midnight.
- RAC Annual Dinner; Willie attended.
- Club telescopes are available to paid-up members:
 - o If you have one of the club 'scopes, take a picture and send it to Jack so we can display them.
 - o 13" dobsonian, currently with Jack Chastain, is available.
 - o ETX80 maksutov, currently with Joe Macagne.
 - o 4" Tasco refractor on an EQ mount, currently with Paul Chauvet, is available.
 - o A planetary camera and a "deep space" camera are available. See Willie.
- Dues are Due! \$25 for the year by check or cash. PayPal also available for a slightly higher price.

New Business:

- **Annual Dinner:** It will be at The Would restaurant in Highland, at 6:30 PM on April 14 (primary choice) or April 7. Final date will be advertised on the Yahoo list. Ordering from the menu.
- **NEAF:** April 21-22. Do we want to have a table? After discussion, no.
- **Walkway over the Hudson:** They have a new organizational structure and Eric Myers is our rep. More info coming.
- **May club meeting location:** The May meeting will be at the Elting Library in New Paltz and will start with business meeting at 6:30 and talk by Willie Yee at 7 PM. This is in conjunction with Elting's month of science events.

Observing Reports:

- Mentions of morning planet conjunctions.

Visitors/New Members:

There were about 14 people in attendance at the end of the business meeting.

The meeting was adjourned at about 8:10 PM. The next meeting is on April 17th, 2018.

The presentation that followed was "TESS: The Transiting Exoplanet Survey Satellite" by our own Dr. Willie Yee, Solar System Ambassador.

Submitted by James Rockrohr, April 15th, 2018.

May Meeting at the Elting Memorial Library?

From Willie via the Yahoo group:

Elting Memorial Library is have a series of science programs on Tuesday evenings in May. They would be interested in hosting our May meeting on the 15th.

Since their series starts a 7 PM, this would involve moving our meeting time up to 7 PM that evening.

The benefit to us would be a much larger turnout.

Would people be OK with changing the time?



What's It Like Inside Mars?

By Jessica Stoller-Conrad

Mars is Earth's neighbor in the solar system. NASA's robotic explorers have visited our neighbor quite a few times. By orbiting, landing and roving on the Red Planet, we've learned so much about Martian canyons, volcanoes, rocks and soil. However, we still don't know exactly what Mars is like on the *inside*. This information could give scientists some really important clues about how Mars and the rest of our solar system formed.

This spring, NASA is launching a new mission to study the inside of Mars. It's called Mars InSight. InSight—short for Interior Exploration using Seismic Investigations, Geodesy and Heat Transport—is a lander. When InSight lands on Mars later this year, it won't drive around on the surface of Mars like a rover does. Instead, InSight will land, place instruments on the ground nearby and begin collecting information.

Just like a doctor uses instruments to understand what's going on inside your body, InSight will use three science instruments to figure out what's going on inside Mars.

One of these instruments is called a seismometer. On Earth, scientists use seismometers to study the vibrations that happen during earthquakes. InSight's seismometer will measure the vibrations of earthquakes on Mars—known as marsquakes. We know that on Earth, different materials vibrate in different ways. By studying the vibrations from marsquakes, scientists hope to figure out what materials are found inside Mars.

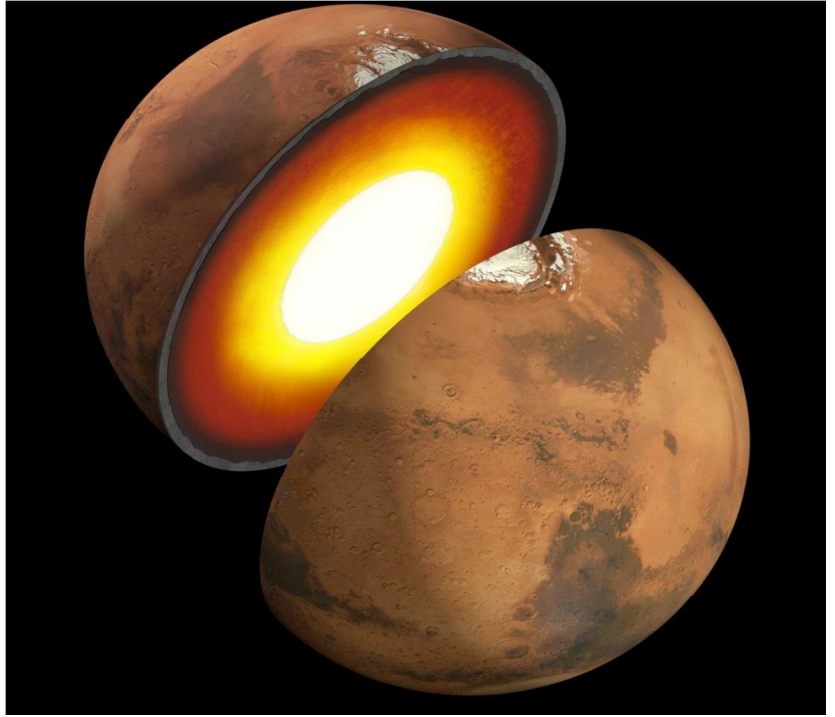
InSight will also carry a heat probe that will take the temperature on Mars. The heat probe will dig almost 16 feet below Mars' surface. After it burrows into the ground, the heat probe will measure the heat coming from the interior of Mars. These measurements can also help us understand where Mars' heat comes from in the first place. This information will help scientists figure out how Mars formed and if it's made from the same stuff as Earth and the Moon.

Scientists know that the very center of Mars, called the core, is made of iron. But what else is in there? InSight has an instrument called the Rotation and Interior Structure Experiment, or RISE, that will hopefully help us to find out.

Although the InSight lander stays in one spot on Mars, Mars wobbles around as it orbits the Sun. RISE will keep track of InSight's location so that scientists will have a way to measure these wobbles. This information will help determine what materials are in Mars' core and whether the core is liquid or solid.

InSight will collect tons of information about what Mars is like under the surface. One day, these new details from InSight will help us understand more about how planets like Mars—and our home, Earth—came to be.

For more information about earthquakes and marsquakes, visit: <https://spaceplace.nasa.gov/earthquakes>



An artist's illustration showing a possible inner structure of Mars.
Image credit: NASA/JPL-Caltech

2018 Star Party Schedule

Date	Time	Sunset	End Civil Twilight	Nearest New Moon
January 19th	7:00 PM	4:55 PM	5:25 PM	January 17th
February 16th	7:00 PM	5:30 PM	5:58 PM	February 15th
March 16th	7:00 PM	7:03 PM	7:31 PM	March 17th
April 13th	8:00 PM	7:34 PM	8:03 PM	April 16th
May 11th	8:00 PM	8:04 PM	8:35 PM	May 15th
June 15th	8:30 PM	8:31 PM	9:06 PM	June 13th
July 13th	8:30 PM	8:29 PM	9:02 PM	July 13th
August 10th	8:00 PM	8:00 PM	8:31 PM	August 11th
September 7th	7:30 PM	7:18 PM	7:46 PM	September 9th
October 5th	7:00 PM	6:30 PM	6:58 PM	October 9th
November 9th	7:00 PM	4:41 PM	5:10 PM	November 7th
December 7th	7:00 PM	4:25 PM	4:46 PM	December 7th

Directions To The Star Party Site

[Lake Taghkanic State Park](#) is in the town Ancram, NY. The park entrance is on the Taconic Parkway 10 minutes north of the exit used for Wilcox park.

Star Parties at Lake Taghkanic are held in the West Parking lot, next to the beach. The skies are darker than in Wilcox, with less stray light to deal with. The horizon is also much lower, especially to the south and east, making many more targets possible.

IMPORTANT: all events at Lake Taghkanic State Park require an **RSVP** which includes license plate number of the car you are bringing (please do so via [Meetup](#)). The park is patrolled by state police, and all non registered cars will be ticketed and risk our use of the park.

General Information:

- ♦ For the foreseeable future, all indoor meetings will be held on the 3rd Tuesday of each month in Coykendall Science Bldg., SUNY New Paltz (directions above) at 7:30 PM. All indoor events are FREE! All are welcome. The presentations are generally geared towards teenagers and up. For more information, call the Club Hotline.
- ♦ Dates listed for star parties are the primary dates. The rain date is the following night unless otherwise noted. Only one session is held for a given weekend, usually on the primary date, Friday, unless postponed (usually due to inclement weather) to the backup date, Saturday. Exceptions to this are noted in the "Scheduled Events" section above.
- ♦ All outdoor events are FREE! All are welcome. If you bring small children, it is **your** responsibility to keep a close eye on them. Please do not bring white-light flashlights. Instead, bring a red astronomer's flashlight or an ordinary flashlight covered with several layers of red cellophane. If in doubt about the weather, check the status of the event at www.midhudsonastro.org.