



Mid-Hudson Astronomical Association January, 2017

Website: www.midhudsonastro.org

Yahoo Group: MHAstro

President : Willie Yee
Secretary: Jim Rockrohr
Newsletter Editor: Rick Versace
Publicity: Paul Chauvet
Speakers: Paul Granich

Vice President: Jack Chastain
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

Minutes of the monthly meeting of the Mid Hudson Astronomical Association, December 20, 2016

The meeting was called to order at 7:39 PM by President Willie Yee in the Auditorium of the Coykendall Science Center at SUNY, New Paltz, NY.

The minutes of the last meeting were approved as published in the most recent newsletter.

Officer's Reports:

Membership: Ken Bailey will take over for Caryn temporarily. Dues for 2017 are now due.

Treasurer: Ken Bailey was present. See his latest report as published in the newsletter. Dues are due!

Treasurer's Report for the month of December, 2016

Date: 8 January, 2017

Bank Balance:	\$2816.92
Outstanding Checks:	\$ 0
Outstanding Deposits:	\$ 0
Ending Bank Balance:	\$2816.92
Checkbook Balance:	\$2816.92
Balance with Bank:	Yes

Ending balance total:	\$2816.92
Notes:	Nothing outstanding.
Respectfully submitted:	Ken Bailey Treasurer

Outreach: No report

Publicity: Paul Chauvet was present. Send him info on public events.

Webmaster: Paul Chauvet was present. No issues known.

Upcoming programs: The following information was shared:

- January – “Looking for Cosmic Glue: Dark Matter Searches with XENON” by Dr. Ethan Brown, Assistant Professor of Physics at Rensselaer Polytechnic Institute.

Old Business:

- **Club Telescopes:**
 1. Should we sell the Criterion? Some Discussion. Willie will add more details on Yahoo list.

New Business:

- Insurance payment is due in February; it is going up \$66.00. Ken will investigate alternatives.
- We have received a donation of a “classic” Meade LX-200 with no tripod or eyepieces. What do we want to do with it? Possibly donate it to another group who can build an observatory.
- Bill Walsh may have another telescope for the club. Details to follow.
- Election of Officers: All elected unanimously.
 - President: Willie Yee
 - Vice President: Jack Chastain
 - Secretary: James Rockrohr
 - Treasurer: Karen Tulchinsky
 - Membership: Caryn Sobel
 - Publicity: Paul Chauvet
 - Speakers: Paul Granich
 - Newsletter: Rick Versace
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Observing Reports:

- (none reported)

Visitors/New Members:

There were about 9 people in attendance at the end of the business meeting.

The meeting was adjourned at about 8:04 PM. The next meeting is on January 17th.

The presentation that followed were presentations by various members, a book raffle, and cookies!

Submitted by James Rockrohr, January 15, 2016.



Comet Campaign: Amateurs Wanted

By Marcus Woo

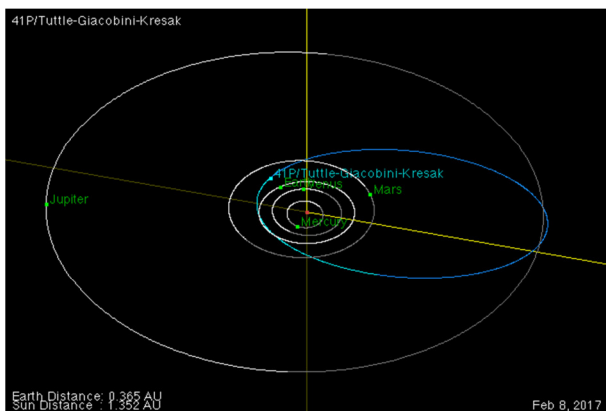
In a cosmic coincidence, three comets will soon be approaching Earth—and astronomers want you to help study them. This global campaign, which will begin at the end of January when the first comet is bright enough, will enlist amateur astronomers to help researchers continuously monitor how the comets change over time and, ultimately, learn what these ancient ice chunks reveal about the origins of the solar system.

Over the last few years, spacecraft like NASA's Deep Impact/EPOXI or ESA's Rosetta (of which NASA played a part) discovered that comets are more dynamic than anyone realized. The missions found that dust and gas burst from a comet's nucleus every few days or weeks—fleeting phenomena that would have gone unnoticed if it weren't for the constant and nearby observations. But space missions are expensive, so for three upcoming cometary visits, researchers are instead recruiting the combined efforts of telescopes from around the world.

"This is a way that we hope can get the same sorts of observations: by harnessing the power of the masses from various amateurs," says Matthew Knight, an astronomer at the University of Maryland.

By observing the gas and dust in the coma (the comet's atmosphere of gas and dust), and tracking outbursts, amateurs will help professional researchers measure the properties of the comet's nucleus, such as its composition, rotation speed, and how well it holds together.

The observations may also help NASA scout out future destinations. The three targets are so-called Jupiter family comets, with relatively short periods just over five years—and orbits that are accessible to spacecraft. "The better understood a comet is," Knight says, "the better NASA can plan for a mission and figure out what the environment is going to be like, and what specifications the spacecraft will need to ensure that it will be successful."



1An orbit diagram of comet 41P/Tuttle-Giacobini-Kresak on February 8, 2017—a day that falls during the comet's prime visibility window. The planets orbits are white curves and the comet's orbit is a blue curve. The brighter lines indicate the portion of t

The first comet to arrive is 41P/Tuttle-Giacobini-Kresak, whose prime window runs from the end of January to the end of July. Comet 45P/Honda-Mrkos-Pajdusakova will be most visible between mid-February and mid-March. The third target, comet 46P/Wirtanen won't arrive until 2018.

Still, the opportunity to observe three relatively bright comets within roughly 18 months is rare. "We're talking 20 or more years since we've had anything remotely resembling this," Knight says. "Telescope technology and our knowledge of comets are just totally different now than the last time any of these were good for observing."

For more information about how to participate in the campaign, visit <http://www.psi.edu/41P45P46P>.

Want to teach kids about the anatomy of a comet? Go to the NASA Space Place and use Comet on a Stick activity!

<http://spaceplace.nasa.gov/comet-stick/>

2017 Star Party Schedule

<i>Date</i>	<i>Time</i>	<i>Sunset</i>	<i>End Civil Twilight</i>	<i>Nearest New Moon</i>
January 27th	7:30PM	5:05PM	5:35PM	January 27th
March 3rd	7:30PM	5:49PM	6:17PM	February 26th
March 24th	7:30PM	7:13PM	7:40PM	March 27th
April 28th	8:00PM	7:51PM	8:21PM	April 26th
May 26th	8:30PM	8:19PM	8:52PM	May 25th
June 30th	8:30PM	8:34PM	9:09PM	June 23rd
July 28th	8:30PM	8:18PM	8:49PM	July 23rd
August 18th	8:30PM	7:51PM	8:20PM	August 21st
September 22nd	7:30PM	6:52PM	7:20PM	September 20th
October 20th	7:30PM	6:06PM	6:35PM	October 19th
November 17th	7:30PM	4:33PM	5:04PM	November 18th
December 15th	7:30PM	4:26PM	4:48PM	December 18th

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.