

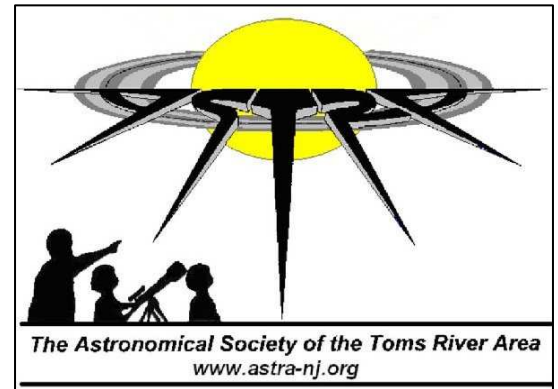
ASTRAL PROJECTIONS

July 2009

www.ASTRA-NJ.org

**** PLEASE NOTE ****

Meetings are in the Solar Lounge beginning at 7:00 PM. The Solar Lounge is located in the Ocean County College Center building across from the Planetarium. The relocation of the meeting is due to the renovation of the planetarium building.



With a paid-up family membership for 2009, when you attend a monthly meeting, each family may enter their name into a free random drawing for a door prize to be given away during the meeting.

Our Next Meeting – Friday – 7 PM – July 10, 2009

Famous Astronomers of the 17th Century: Rich Brady will be present information about famous astronomers of the 17th century and their efforts to prove the leading theories of the day.

2009 Meeting Schedule

See www.ASTRA-NJ.org for latest update
(All meetings start at 7:00 PM unless otherwise noted)

July 10th – Famous Astronomers of the 17th Century presented by Rich Brady.

August – No Meeting (Picnic Date Aug 15 – place to be determined)

September 11th – Space Shuttle Columbia STS 61-C mission Guest Speaker Astronaut Robert Cenker

October 9th – Mirror Grinding presented by Gene Russo

November 13th – Star Party Roundup

December 11th – Annual Awards Meeting

Star Party Plans

For members who enjoy observing the skies, checkout the following list. ASTRA hosts several *public* and *private* star parties, coordinated by Ro Spedalieri.

July 17th: The Lighthouse Center, ASTRA members only.

July 25th: Jake's Branch Park Beachwood, open to the public.

July 31st: The Lighthouse Center, ASTRA members only.

August 1st: OCC Summer star watch, open to the public.

August 14th: The Lighthouse Center, ASTRA members only.

August 21st: Jake's Branch Park Beachwood, open to the public.

August 28th: The Lighthouse Center, ASTRA members only.

August 29th: Air Cadets, TBD.

September 12th: Berkeley Pride Day, open to the public.

See the [ASTRA website](#) for the latest times, dates, and directions.

Highlights of the Last Meeting

June 12, 2009

Discussions:

The Gambas offered to host the picnic at their house. August 15th was the date discussed.

Note: The Gambas have another commitment on the 15th, so we have some choices which we will discuss at the next meeting:

1. Move the picnic to the 16th at the Gamba's house. (This was acceptable to them.)
2. Keep the picnic on the 15th and move it to another location.
3. Select a different date.

Roger Blake cancelled his appearance at the next meeting due to personal problems. Rich Brady will fill in with "Famous Astronomers of the 17th Century."

We are in need of a Newsletter Editor. Please contact one of the club officers if you are interested.

Celestial Navigation:

Sarah Waters went through a detailed discussion on Celestial Navigation. She showed us a sextant and discussed all of its features. The goal is to find your location use time and sextant readings. Latitude can be found by measuring the altitude of the Sun at local noon and applying the formula for latitude. Longitude can be determined by comparing local noon with Greenwich Mean Time and applying the equation of time. The actual usage of the sextant and determination of latitude and longitude are much more involved than indicated in this summary. Sarah did an outstanding job presenting this material. She said that she really hadn't done this since she took the Celestial Navigation course several years ago.

2009 July Celestial Events: supplied by J. Randolph Walton (Randy)

Day	Date	Time (EDT)	Event
Wed	Jul 1	01:31	Ganymede eclipses Io
		22:49	Titan's shadow on Saturn
Sat	4	02:21	Io casts shadow on Callisto
		02:30	Mars Rises
		02:55	Venus Rises
		04:45	Mercury Rises
		05:37	Sunrise
		18:46	Moon Rise
		20:32	Sunset
		22:45	Jupiter Rises
		23:50	Saturn Sets
		Tue	7
05:21	Penumbral Lunar Eclipse, not noticeable		
05:38	Moon Set		
Sat	11	02:20	Mars Rises
		02:52	Venus Rises
		05:07	Io casts shadow on Ganymede
		05:41	Sunrise
		20:30	Sunset
		22:20	Jupiter Rises
		22:40	Moon Rise
Wed	15	05:53	Last Quarter Moon
		13:52	Moon Set
Fri	17	22:00	Titan's shadow on Saturn
Sat	18	02:10	Mars Rises
		02:50	Venus Rises
		05:46	Sunrise
		17:25	Moon Set
		20:26	Sunset
		20:50	Mercury Sets
		21:45	Jupiter Rises
Tue	21	22:55	Saturn Sets
		20:14	Moon Set
Wed	22	22:35	New Moon
			Solar Eclipse, visible in E hemisphere
Sat	25	01:57	Mars Rises
		02:53	Venus Rises
		05:52	Sunrise
		20:20	Sunset
		21:05	Mercury Sets
		21:20	Jupiter Rises
		22:18	Moon Set
Tue	28	22:30	Saturn Sets
		18:00	First Quarter Moon
Thu	30	23:00	S. delta Aquarid meteors (ZHR=20)
		23:42	Moon Set
Thu	30	22:39	Io casts shadow on Europa
		23:21	Io occults one-third of Europa

Astronomical League

www.AstroLeague.org

As an ASTRA member you have a membership in the Astronomical League, which gets you the Reflector magazine, discounts on books, and Observing Awards.

OPT Reward Club

ASTRA members should start receiving their OPT Rewards Club membership cards in the mail. You don't have to do anything just use your Rewards number when you purchase your astronomy equipment from Oceanside Photo & Telescope "OPT" and receive exclusive discounts.

Items for Sale

ASTRA-WEAR: For Embroidered and/or Printed items with the ASTRA Logo

You can see some samples at ASTRA meetings and ordering information for all items on our website, <http://www.astra-nj.org/ASTRA-WEAR.pdf>.

Astronomic Group Purchase, Items for Sale, or Help Wanted Advertisements: If you want to handle a Group Purchase, have Sale items, or need Help contact the President President@astra-nj.org to announce it at a meeting and send the advertisement to the newsletter (See *Newsletter* below).

Newsletter: E-mail material to Newsletter@astra-nj.org

Executive Board: **President** – Rich Brady, President@astra-nj.org; **Vice President-Secretary** – Ed Mullen, VP@astra-nj.org; **Treasurer** - Ro Spedaliere, Treasurer@astra-nj.org; **Newsletter Editor** – Allen Malsbury, Newsletter@astra-nj.org; **Webmaster** - John Endreson, Webmaster@astra-nj.org.
