



# ASTRAL PROJECTIONS

March 2011  
Volume 22 Issue 3

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## Meeting Schedule

### March 11<sup>th</sup> Meeting:

"Open General Meeting" +  
Public Star Party

Date: Friday, 3/11/2011

Time: 7:00 PM - 10:00 PM

Location: Robert J. Novins  
Planetarium, College Drive,  
Ocean County College, Toms  
River, NJ 08754

### April 8<sup>th</sup> Meeting:

"Open General Meeting" +  
Public Star Party

Date: Friday, 4/8/2011

Time: 7:00 PM - 10:00 PM

Location: Robert J. Novins  
Planetarium, College Drive,  
Ocean County College, Toms  
River, NJ 08754

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## ASTRA Membership Participation Needed!

We are looking for topics for our meeting presentations and presenters/speakers. If there is a topic you would like to see covered at one of this year's ASTRA meetings or if you would like to do a presentation yourself, let your club officers know about it by filling out the questionnaire and sending it to: [Newsletter@astra-nj.org](mailto:Newsletter@astra-nj.org)

Also if you know of anyone who would like to give a presentation at one of our meetings you can let them know that we are interested. Unfortunately ASTRA's budget is not sufficient to allow payment for any presenters/speakers so be sure to mention this to them up front.

## Astronomy Day "Saturday April 30<sup>th</sup> 2011" Participation Needed!

If you are interested in participating at this year's Astronomy Day activities and you have some ideas on how you can help, and if you would like to participate by setting up a presentation table let your club officers know about it by filling out the questionnaire and sending it to: [Newsletter@astra-nj.org](mailto:Newsletter@astra-nj.org)

## Best time to see Saturn in 2011 starts with "retrograde".

Starting in January 2011 – Saturn began to go in a *retrograde* or *westward* direction in front of the constellation Virgo. That's a signal that the best time to see Saturn in 2011 has begun.

The planet Saturn – a golden world that appears to shine steadily on the sky's dome – is rising in the east around 9 p.m. now. Saturn climbs upward through the night and soars to its highest point in the southern sky around 3 a.m. The beginning of retrograde motion means that Saturn will be rising earlier each evening with each passing day. It'll soon be in a more convenient place for evening viewing.

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“Saturn” Continued from page 1



What’s happening here? As a general rule, Saturn appears to travel eastward in front of the background stars. But you won’t see Saturn moving eastward in front of Virgo again until after mid-June 2011. However, Saturn doesn’t literally change direction. If you think in terms of Saturn’s orbit around the sun, you might enjoy knowing that Saturn *always* travels in an eastward direction in orbit.

But our Earth in its smaller, faster orbit around the sun is now in the process of *passing between* Saturn and the sun. We’ll pass between Saturn and the sun on April 3, 2011. Saturn is the 6th planet outward from the sun and moves more slowly than we do in orbit. Saturn now appears to be moving in retrograde – opposite its usual eastward motion – because our planet Earth, like a fast racing car, is now zooming by Saturn from the inside track. You know how, when you’re in a fast car on the highway and you pass a slower car, it can seem to be moving backwards? That’s the case here. As seen from Earth, Saturn will *look like* its moving westward through the stars – even though it’s really not. Isn’t nature cool?

If you want, you can track Saturn’s upcoming retrograde for yourself. Using the star chart above notice Saturn’s present position relative to Theta Virginis, the faint 4th-magnitude star. If you can’t

see this star with the unaided eye, use binoculars. They’re only about 1.5 degrees apart (the width of your little finger, if you hold it an arm length away).

Now see if you locate and the brighter 3rd-magnitude star Porrima, named for a Roman goddess of prophecy. If my ‘prophecy’ holds true, you’ll see Saturn a scant one-quarter degree from Porrima at the end of Saturn’s retrograde in mid-June.

With its retrograde motion already begun, Saturn will be at its best for about the next four months of 2011.

## Spend some time with Orion “The Hunter”

The constellation figure of the Hunter is one of the few that bears some resemblance to what it represents. Orion has a distinctive line of three stars around his waist, Orion's Belt, and stars to mark his shoulders and knees. He has a knot of lesser stars for a head and a line of them to the right as a shield with which he defends himself against the charging bull Taurus. He wields a club above his head and a line of stars hangs below his Belt to represent Orion's Sword.



It is here in the Sword that we find the Orion Nebula, the glowing cloud of gas and dust that is the best studied region of new star and planet formation in the sky. It may be glimpsed by the naked eye, but is much easier through binoculars. Recent studies place it some 1,344 light years away, a little beyond Orion's main stars.

“Orion” Continued on page 4

# Whats up this month?

## March 2011 Celestial Events

**1<sup>st</sup> Dawn:** Venus is to the right of the thin crescent Moon.

**4<sup>th</sup> New Moon** (3:46 pm EST)

**5<sup>th</sup> Dusk:** Shortly after sunset low in the west, Mercury will be lower left of very thin crescent Moon.

**6<sup>th</sup> Dusk:** Jupiter is left of the crescent Moon.

**12<sup>th</sup> First-Quarter Moon** (6:45 pm EST)

**13<sup>th</sup> Daylight-Savings Time** begins at 2 am.

**13<sup>th</sup>-16<sup>th</sup> Dusk:** Mercury passes just to the right of Jupiter. This is your easiest chance to locate Mercury all year.

**17<sup>th</sup>-28<sup>th</sup> Dusk:** Mercury continues its best apparition of 2011, shining more than 10 deg. above the western horizon a half hour after sunset.

**19<sup>th</sup> Full Moon** (2:10 pm EDT)

**20<sup>th</sup> Spring begins at Equinox,** (7:21 pm EDT)

**20<sup>th</sup>-21<sup>st</sup> All Night:** Spica is near the Moon from shortly after dark until sunrise.

**26<sup>th</sup> Last-Quarter Moon** (8:07 am EDT)

**31<sup>st</sup> Dawn:** Venus is lower right of the thin crescent Moon.

## ASTRA Public Outreach & Star Parties Schedule for March

### Jakes Branch County Park Star Party

A night under the stars. Come see the wonders of the Universe!

Date: Saturday, 3/26/2011

Time: 7:30 PM - 10:00 PM

Location: Jakes Branch County Park, Double Trouble Rd,  
Beachwood, NJ 08722

### Jakes Branch County Park Star Party 2

A night under the stars. Come see the wonders of the Universe!

Date: Saturday, 4/23/2011

Time: 7:30 PM - 10:00 PM

Location: Jakes Branch County Park, Double Trouble Rd,  
Beachwood, NJ 08722

**Call the ASTRA Hotline 609-971-3331 or check the online message board on the date of the star party for up to date information on these events.**



Astronomical League National Headquarters  
9201 Ward Parkway; Suite 100  
Kansas City, MO 64114  
1-816-333-7759 or [www.astroleague.org](http://www.astroleague.org)

The REFLECTOR is published in March, June, September and December. If you do not receive your copy of the REFLECTOR magazine, contact Astronomical League Coordinator (Alcor) Ro Spedaliere (Treasurer@astra-nj.org) or the ASTRA Hotline 609-971-3331 and leave a message.

### **Astronomical Items for Sale, or Help Wanted Advertisements:**

If you have an item to Sell, or need help with an astronomical problem (a question, or Telescope setup) contact the President [President@astra-nj.org](mailto:President@astra-nj.org) or the ASTRA Hotline 609-971-3331 to announce it at a meeting and send the advertisement to the newsletter (See Newsletter below).

**Newsletter:** E-mail material (Meeting reports, Observing reports) to [Newsletter@astra-nj.org](mailto:Newsletter@astra-nj.org)

### **EXECUTIVE BOARD**

**President** – John Endreson,  
[President@astra-nj.org](mailto:President@astra-nj.org);

**Vice President-Secretary** – Bob Salvatore, [VP@astra-nj.org](mailto:VP@astra-nj.org);

**Treasurer** - Ro Spedaliere,  
[Treasurer@astra-nj.org](mailto:Treasurer@astra-nj.org);

**Newsletter Editor** – John Endreson, [Newsletter@astra-nj.org](mailto:Newsletter@astra-nj.org);

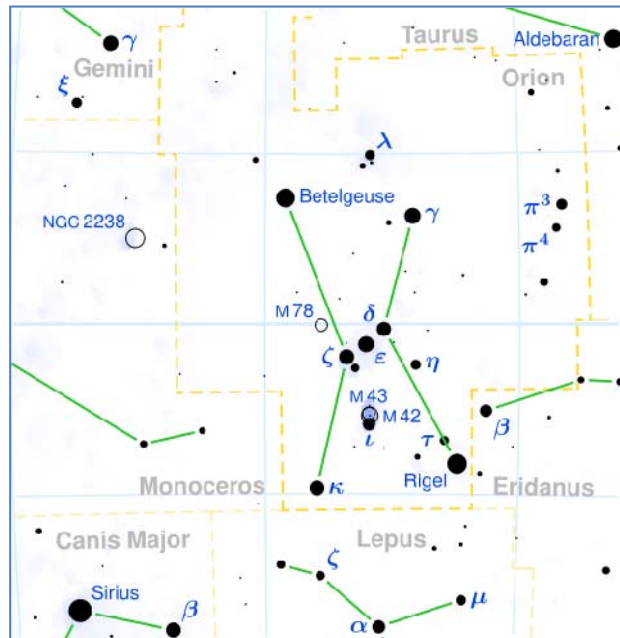
**Webmaster** - John Endreson,  
[Webmaster@astra-nj.org](mailto:Webmaster@astra-nj.org).

Check us out on Facebook, search groups for ( ASTRA Astronomy ) and look for our logo.



“Orion” Continued from page 2

The red supergiant Betelgeuse and the contrasting blue supergiant Rigel are Orion's brightest stars, with Betelgeuse pulsating erratically and usually fainter than Rigel. They are perhaps 640 light years and 780 light years away respectively, give or take more than 100 light years, and each is thought to be 17-19 times more massive than our Sun. They are also tens of thousands of times more luminous and neither can live for much more than 10 million years before exploding in a type II supernova, scattering its ashes back into space.



Betelgeuse appears to be the most evolved and there has been recent tabloid speculation that it might go supernova any day now, turning night into day as a second sun appears in the sky for a few weeks. In fact, the explosion may not occur for a million years; and even if it were to come today, it might shine no brighter than our nearly full Moon.



ASTRA is recognized as having one of the best public outreach programs in the country as recognized by Astronomy magazines “Out of this World” public outreach program. For more information go to <http://nightsky.jpl.nasa.gov> or contact Ro Spedaliere (Treasurer@astra-nj.org) or the ASTRA Hotline 609-971-3331

# ASTRA Survey 2011

## Objective

This survey was created to determine from the members how well the club is doing, and the direction the club should take in the future. To these ends, please complete this survey. If you want to respond in the negative to a topic, please do so. The club does not have to do everything, nor have everyone agree. Please complete this form and return it to the club officers by e-mailing it to (**President@astra-nj.org**). Or print out and complete this form and bring it to the next meeting, or mail it to:

A.S.T.R.A. Robert J. Novins Planetarium  
Ocean County College P.O. Box 2001  
Toms River NJ 08754-2001

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## Monthly Meetings:

How often do you attend an ASTRA meeting?	Never	Sometimes	Usually
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Do you find them interesting/informative?	Never	Sometimes	Usually
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What types of presentations/topics would you like to see?

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What types of presentations/topics would you like to volunteer to do?

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## ASTRA Star Parties:

How often do you attend ASTRA's Star Party?	Never	Sometimes	Usually
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Do you find them interesting/informative?	Never	Sometimes	Usually
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What could ASTRA do to make its Star Parties more interesting/informative, and or more accessible?

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## Club Newsletter "Astral Projections":

How often do you read the club newsletter?	Never	Sometimes	Usually
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Do you find the newsletter interesting/informative?	Never	Sometimes	Usually
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What could ASTRA do to make its Newsletter more interesting/informative?

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ASTRA Website:

