

# North Jersey Astronomical Group The ark Sky Observer A Publication of the North Jersey Astronomical Group

October, 1997

#### Vol. X, No. 4

## Thursday nights are Telescope Nights!

Telescope Nights at Montclair State have resumed. Join us, weather permitting, from 8:00-9:00 p.m. in front of Richardson Hall. The Moon will be featured on October 16; November 6 & 13; and December 4 & 11. Jupiter will be visible in September and October. Saturn can be seen during October, November and December.

# The Dark Sky Observer

is a publication of the North Jersey Astronomical Group (NJAG), whose purpose is to promote the study and knowledge of the science of astronomy. The Dark Sky Observer is produced monthly for NJAG members by NJAG members.

FROM THE EDITOR: Remember the Dark Sky Observer needs your input! Letters, comments, suggestions, and articles are welcomed and encouraged. Contact the editor at a meeting, at (973) 778 - 3038 or at this address: Editor, Dark Sky Observer North Jersey Astronomical Group P.O. Box 1472 Clifton, NJ 07015-1472 (973) 614-9220 http://www.csam.montclair.edu/~west/njag.html

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# **November Sky Preview**

Venus is a spectacular sight in November. On Monday, November 3 and Tuesday, November 4, Venus and Mars are joined by a beautiful crescent Moon. The three are low in the southwest after sunset. Venus reaches its great elongation east on the evening of Wednesday, November 5. Greatest elongation occurs when Mercury or Venus appears at its furthest point away from the Sun. Because it is on average 67 million

•• One never can be alone if he is familiarly acquainted with the stars".

— H.W. Warren, D.D. (1886)

miles from the Sun, Venus can appear as much as 47 degrees away from the Sun. Unfortunately for New Jersey, this elongation is occurring too far south and Venus hugs the horizon through the end of the year. Still, Venus will shine spectacularly as the evening star through December.

The Leonid meteor shower is at maximum on the evening of Sunday, November 16 and the morning of Monday, November 17. The actual peak of activity should come around 6:00 a.m. on the 17th. The Moon will be a few days past full, in the sky for much of the night, and so not as many meteors will be visible as on a dark night. If we had perfectly clear and dark skies the Leonids would show us 40 meteors or more per hour. Given the light pollution, air pollution, and moonlight, we can expect to see a dozen or so meteors per hour at best from New Jersey.

With the exception of the Big Dipper (Ursa Major), the most famous constellation is Orion. It is easy to find and is made up of bright stars. Orion begins to make his appearance in the early evening sky towards the end of November. The three stars which make up his belt lie close together and are lined up in a row. This distinct pattern makes Orion easy to find. The constellation is made up of seven bright stars, two of which are amongst the brightest in the night sky. On the top ten list of brightest stars visible from New Jersey, Rigel comes in at #5 and Betelgeuse at #9. The bluish-white star Rigel is pronounced "RYE-jel" and is located in his right leg. The reddish or orange colored star Betelgeuse marks his shoulder. Betelgeuse is pronounced "BET-el-jooz," not "Beetle Juice!" If the sky is clear enough, a few other stars are visible. For example, below the three stars in his belt are three more stars in a vertical line. This is the sword of Orion (the middle star is actually M42 (the Orion Nebula) which is an easy binocular object). You may also spot a group of faint stars which mark his head. Under dark skies, you may see Orionís belt as a curve of stars to the west of the belt or his arm holding a club over his head.  $\ddagger$ 

The NJAG's StarLine is updated weekly with the latest astronomical information.

**Call (973) 614-9220** 24 hours a day!

## **Dues Due?**

This may be your last issue of the Dark Sky Observer! If your name is on the following list, it is time to renew your membership dues!

Gene Faulkner Esther Fishman Enrique Hurtado Mark Ivanovic David Lambert Mervyn Montgomery Jacquelin Perkins James Piombino Donald Predpall Curtis & Evelyn Totten Ken Udani Theresa Whitehead

Send a check for \$15.00 made out to the NJAG to: NJAG, PO Box 1472, Clifton, NJ 07015. If you have any questions regarding dues, contact our Membership Chair Ruth Koenig at (973) 340-4640 or dkoenig@intercall.com

# Magazine Discounts

Remember that NJAG members get a discount on Astronomy and Sky & Telescope magazines. If you are a subscriber, or would like to subscribe, contact Ruth Koenig at (973) 340-4640.

# **Monthly Meetings**

Monthly meeting of the NJAG are held on the second Wednesday of the month at 8:00 p.m. Richardson Hall, Room 226, Montclair State University. New members please note that maps of campus are available. Contact Kevin at (973) 778-3038 or kconod@easyway.net.

#### **October Meeting**

October 8, 1997 Presentation: The NJAG will premier a new film "Comet Odyssey" by Cyanogen Productions. It shows the movement of comet Hyakutake against the stars made by several amateur astronomers in Canada. It's really beautiful and interesting to hear all the trials, tribulations, and joys of making the film. Dennis di Cicco of Sky & Telescope magazine gave it multiple "wow!"s!

## November Meeting

**November 12,1997** Speaker: Barry Malpas of Amateur Astronomers Inc. will give a presentation on Spectroscopy.

## **December Meeting**

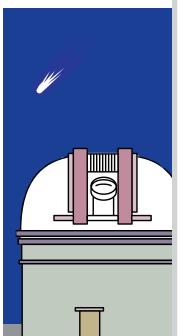
December 12, 1997

Winter Solstice Celebration: Good friends and good food are the perfect way to celebrate the solstice!



### **Destination Mars!**

The Newark Museum's Dreyfuss Planetarium is featuring a new exhibit, Destination Mars. Learn more about the past present and future of the Red Planet! Destination Mars is free and open to the public Wednesday through Sunday 12 Noon to 5:00 p.m. Call (973) 596-6529 for more information and directions.





#### **Cometary Spring** by David Lambert

A comet, all alone in the night, Drifts on an ocean of blackest pitch, heavily bundled in a coat of ice and dust, And shimmers softly amidst countless stars While millennia pass in the blink of an eye.

But even the longest night must end at last, While the bitterest winter yields to spring. And before the warmth of the welcoming Sun The comet briefly sheds its coat,

Joyously casting ice and dust to the void that brilliantly glows in the wind of daylight and riotously streams like frosty hair.



#### Committees

Volunteers are needed for the following committees (most are selfexplanatory, except where noted):

#### Membership

Newsletter

#### **Public Night**

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Observing (arranging
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observing sessions)
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Library

Computer

Education

Program (making

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arrangements for guest
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speakers)

Astrophotography/

Darkroom

#### Project

(telescope building, etc.)

If you are interested, or have any questions, please contact Joe Marzullo, 857-1678 or marzullo@saturn.montclair.edu, or Gene Faulkner , 779-7932 or wizbang@intercall.com

# Bang, You're dead! by

The purpose of this article is not to convince you that I should be the head of a very large corporation that sends ships into space to deflect or retrieve asteroids for practical purposes. I'm going to give you some Dale Carnegie, because I want to win friends and influence people (I haven't finished reading the 60th printing of his book).

I'm here to tell you that we're are all domed unless you give me all your money. Read Aviation Week & Space Technology, March 24, 1997. If a 2.0 km Near Earth Object hit the Earth, the energy released would equal a 10,000,000 megaton explosion, kill 3,000,000,000 people and total two quadrillion US Dollars in damage. "Oofahh!" (That's borrowed from the Italians I work with).

I'm jumping the gun by assuming that you want more information about what you get in return. Ah. Did you know employers prepare for increased on the job accidents just after the change from Standard time to Daylight Savings? The number of accidents returns to normal after we get use to the new time.

### by John Miksits

OK. In the matter of preparation, the world may have a similar destiny with comets or asteroids. I'm talking big bucks here.

Aviation Week & Space Technology says the probability of successfully intercepting a 0.25-km comet with retrofitted ICBM's in a panic could cost a trillion dollars times the cube of the NEO's diameter. And the probability of success is only 40%. To build a system with a 70% likelihood of stopping a 2-km comet could cost a trillion dollars. Cost. this writer's guess is US \$400 million to \$10 billion. The probability of success should be high for comets and would be higher for asteroids. So, Aviation Week & Space Technology Rule #1 if we want to Save the World: "Intensify-detection-and-prepare-an-intercept strategy provides the best protection-versus-cost tradeoff. and could be done near-term." ☆

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## **The Dark Sky Observer**

North Jersey Astronomical Group P.O. Box 1472 Clifton, NJ 07015-1472

## **Sky Calendar**

- 1 Moon 9.6° N of Antares
- 4 Moon 6.3° N of Mars and 8.6° N of Venus
- 6 Venus at greatest elongation East
- 7 First Quarter Moon
- 11 Veterans' Day
- 11 Moon 0.4° NNW of Saturn
- **12** NJAG Business Meeting, 8pm
- **15** Full Moon of November 15, known as the Beaver Moon
- 16-17 Leonid Meteor Shower peaks
- 26 Memorial Day observed
- 21 Last Quarter Moon
- 27 Thanksgiving
- 29 New Moon
- NJAG PUBLIC NIGHTS Montclair State College 8 - 9 p.m.

*			November			
Su	Мо	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6 \$	<b>7</b>	8
9	10	11	<b>12</b>	13	14	<b>15</b> ○
16	17	18	19	20	21	22
23	24	25	26	<b>27</b>	28	29 •
30						