North Jersey Astronomical Group

The Dark Sky Observer

A Publication of the North Jersey Astronomical Group

March/April, 2000 Vol. XIII, No. 1

MARCH MEETING

The March meeting of the North Jersey Astronomical Group will feature Dr. Wil Van der Veen of Columbia University. Dr. Van der Veen will give a lecture "The Future of the Sun." The meeting will take place Wednesday, March 8 at 8:00 p.m. in Richardson Hall room 226 on the campus of Montclair State University.

APRIL MEETING

On Wednesday, April 12, Alan Witzgal will give a presentation about the red planet at 8:00 p.m. Mars or bust!!.

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) 340-5963 or at this address:
Editor, Dark Sky Observer
North Jersey Astronomical Group
P.O. Box 1472
Clifton, NJ 07015-1472.

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Website:
http://csam.montclair.edu/wwest/njag.html

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Layout Editor: Maja Britton
Publication: Ruth Koenig

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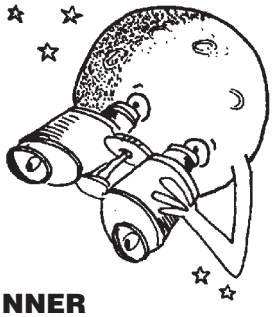
FIELD TRIP TO PLANETARIUM

Members of the NJAG will be going on a field trip to the Newark Museum's Dreyfuss Planetarium on Saturday, March 11. The planetarium is featuring a new program: The Search for Life in the Universe. Join narrator Leonard Nimoy in the search for intelligent life beyond planet Earth. Eavesdrop on signals from space, delve into emerging solar systems, and learn how scientists explain mysterious cosmic phenomena! This 40-minute program is recommended for adults and children ages 10 and up.

The planetarium underwent an extensive renovation last year. It offers a stellar look at the Universe, thanks to its new Zeiss ZKP3 star projector. This is further enhanced by new equipment including a SkySkan automation system, video projectors, computers, and digital audiovisual capability.

The program begins promptly at 2:00 p.m. Tickets are $3.00 for adults, $1 for children under 12. After the program, members may wish to tour the Museum's galleries or visit the Café for lunch. Contact Kevin Conod 973-340-5963 or stargazer@advanix.net to sign up for this trip.

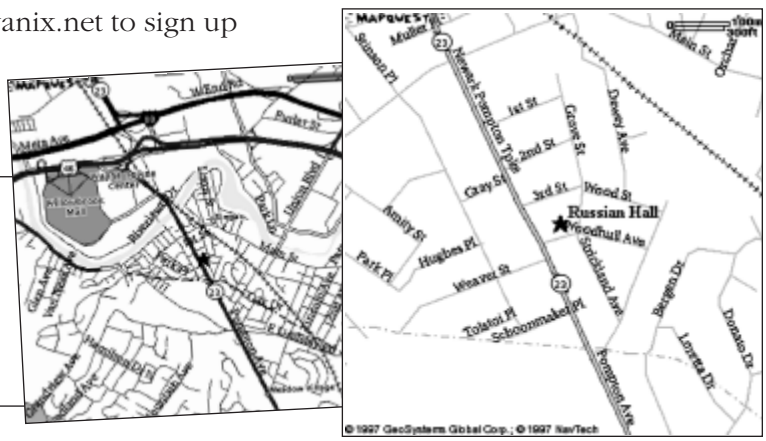


NJAG ANNUAL DINNER

It is that time of year again when we start thinking about our Annual NJAG Dinner. For those of you who are new, this is held at the Russian Hall in Little Falls. We enjoy a buffet dinner, have our annual Astrophotography Contest and a guest speaker.

The date this year is Friday, March 24 and the price is $25.00 a person. Our speaker this year will be Ms. Alice Berman who is project chairman on the FUSE mission. FUSE is an ultraviolet space telescope built by Johns Hopkins University and NASA. She will come up from Maryland and give us the details of this telescope.

Anyone wanting more details can email or call Ruth Koenig at 973-340-4640 or dkoenig@advanix.net. There will be a sign up sheet at the next meeting.



STARLINE

For a weekly update on the night sky, call the StarLine at

973-680-8420

OFFICERS FOR 2000

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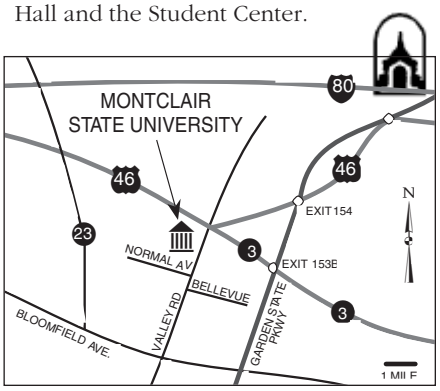
WINTER STARGAZING

Thursday nights are Telescope Nights at Montclair State! Weather permitting, telescopes will be set up in front of Richardson Hall from 8:00 to 9:00 p.m. Telescope Nights are free and open to the public. Feel free to bring your friends and your children!

Directions:

From Route 3 or Route 46 take Valley Road South. Make a right at the light onto Normal Avenue. The main entrance is on the right. Make a right at the stop sign, then take the second right at the information booth. Plenty of parking is available in the parking lots to your right. Richardson Hall, the math and science building, is located on top of the hill next to the Science Hall and the Student Center.



SPECIAL ANNOUNCEMENTS:

- New Jersey Light Pollution Study Commission's Report is now available on-line thanks to Kevin Conod and Eric Kurzewski. Check it out at: http://users.erols.com/njastro/orgs/litpol4a.htm. Print it out and talk to your township about shielded lighting!
- The Practical Observer magazine is a quarterly publication dedicated to the amateur astronomy observer and researcher, is now available at discount rates to members of UACNJ clubs at $12 for 1 year (4 issues), or $23 for 2 years (8 issues). Check it out at the TPO web page: http://users.erols.com/njastro/orgs/tpo.htm.

UACNJ NOTEBOOK

by Barry Malpas

Northeast Astronomy Forum & Telescope Show
Sunday, April 16, 2000
9:00AM to 6:00PM
Rockland Community College, Suffern, NY

Program Schedule includes:
Seth Shostak, SETI Institute
Joshua Roth, S&T, "Behind the Scenes at Sky & Telescope"
Sarah Kennedy, "Evidence for Terrestrial Impacts"
Matt Marulla, "The History of Telescope Design"
Ed Ting, "Telescopes 101"
Robert Naeye, Astronomy, "Galileo at Jupiter"

For further information go to:
http://users.erols.com/njastro/orgs/neaf99.htm

WHY DID THE SOMEONE COLLIDE WITH THE ASTEROID?

by John Miksits • johnmiksits@erols.com

Sitting in your seat you saw the asteroid warning.
You waited patiently for it to pass.
You saw the Someone on the other side of its path waiting.
The climate to travel on this day was fine.
For a moment your thought was on the Someone who could collide with it.
You wondered about going across.
No, the risk you knew was too great.
You knew it was coming because you saw the warning.
Still waiting, you and the Someone are fine.
You saw it coming and so did the Someone who wanted to collide.
The Someone died, but you did not watch the impact.
Yes, you saw the result and now read this.

NEW WEB PAGE

Kevin Conod
stargazer@advanix.net
New Jersey Online is a very popular site on the web (http://www.nj.com). I noticed that they are offering free web sites to community organizations, so I created one for the NJAG. We already have a website on Montclair State's server, but this page could be good publicity for the club and it has some nice features. It has an Astronomy Forum for discussions, a photo gallery, a page for links, and a page which generates maps.

Please visit and let me know what you think:
http://community.nj.com/cc/njag

TELESCOPE FOR SALE

10" diameter Meade Dobsonian. Includes 26mm and 9.7 Super Plossl Meade eyepieces, a Meade 2x Barlow lens, a counterweight balance system, and a wood carrying cradle for transporting. $650.00 for everything. Like new only used a few times.
Contact Frank Grasso at frgr55@aol.com or 201-935-3669.

HUBBLE REOPENS EYE ON THE UNIVERSE

In its first glimpse of the heavens following the successful December 1999 servicing mission, NASA's Hubble Space Telescope has captured a majestic view of a planetary nebula, the glowing remains of a dying, Sun-like star. This stellar relic, first spied by William Herschel in 1787, is nicknamed the "Eskimo" Nebula (NGC 2392) because, when viewed through ground-based telescopes, it resembles a face surrounded by a fur parka. In this Hubble telescope image, the "fur parka" is really a disk of material embellished with a ring of comet-shaped objects, with their tails streaming away from the central, dying star. The Eskimo's "face" also contains some fascinating details. Although this bright central region resembles a ball of twine, it is, in reality, a bubble of material being blown into space by the central star's intense "wind" of high-speed material.

The planetary nebula began forming about 10,000 years ago, when the dying star began flinging material into space. The nebula is composed of two elliptically shaped lobes of matter streaming above and below the dying star. In this photo, one bubble lies in front of the other, obscuring part of the second lobe.

Scientists believe that a ring of dense material around the star's equator, ejected during its red giant phase, created the nebula's shape. This dense waist of material is plodding along at 72,000 miles per hour, preventing high-velocity stellar winds from pushing matter along the equator. Instead, the 900,000-mile-per-hour winds are sweeping the material above and below the star, creating the elongated bubbles. The bubbles are not smooth like balloons but have filaments of denser matter. Each bubble is about one light-year long and about half a light-year wide. Scientists are still puzzled about the origin of the comet-shaped features in the "parka." One possible explanation is that these objects formed from a collision of slow-and fast-moving gases.

The Eskimo Nebula is about 5,000 light-years from Earth in the constellation Gemini. The picture was taken Jan. 10 and 11, 2000.

To see this image visit the Hubble's web page:
http://oposite.stsci.edu/pubinfo/latest.html

NJAG LIBRARY BOOK LIST

by John Miksits • johnmiksits@erols.com

Some recent additions to the NJAG Library:

BOOK TITLE	AUTHOR
Astronomical Equipment For Amateurs	Martin Mobberley
Atlas of The Moon	Antonin Rukl
Beginner's Guide To The Sun	Peter O. Taylor. & Nancy L. Hendrickson
Findercharts of Bright Telescope Objects	Brent Watson
Night Watch	Terence Dickinson
Reading The Earth - Landforms in the Making	Jerome Wyckoff
Space Places	Roger Ressmeyer
Touring the Universe Through Binoculars	Philip S. Harrington
Universe Origins and Evolution	Theodore P. Snow, Kenneth R. Brownsberger

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HYPERSPACE

A Scientific Odyssey Through Parallel Universes, Time Warps and the Tenth Dimension

A Slide/Video Lecture by Dr. Michio Kaku

Thursday, April 13 6:30 p.m.

The Newark Museum • Billy Johnson Auditorium
FREE

Dr. Michio Kaku, a noted theoretical physicist, presents a slide/video lecture on higher dimensions, a.k.a. hyperspace. His lecture provides evidence that suggest that we actually live in a universe of ten real dimensions. Throughout the lecture, Dr. Kaku explores the ten-dimensional universe as he shares insights into time warps, black holes and multiple universes, thus providing glimpses into the universe's jigsaw-puzzle nature.

The Newark Museum

49 Washington St. • Newark, NJ 07101-0540

For program information
call 973-596-6550 (1-800-7-MUSEUM)
or see http://www.newarkmuseum.org/planetarium

This Astronomy Lecture Series is sponsored by
Rutgers/Newark, NJIT, and The Newark Museum.

Sky Calendar

MARCH

SU	MO	TU	WE	TH	FR	SA
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

APRIL

SU	MO	TU	WE	TH	FR	SA
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

March

3 Venus rises in ESE 1 hr before sunrise near last easy old Moon
6 New Moon - 12:17 am EST
6 PM - Look for very young Moon in west
8 NJAG Business Meeting, 8pm
12 First Quarter Moon
13 Mercury 4˚ from Venus
17 St. Patrick's Day
17 Moon near Regulus in Leo
19 At sunset, see Moon and Sun just above opposite horizons
19 Full Moon - Sap Moon - 11:44pm EST
20 Spring begins - 2:35am EST
20 Ceres (mag 6.9) at opposition 11˚ E of Denebola
26 Saturn, Jupiter and Mars in Aries
27 Last Quarter Moon - 7:21pm EST

April

2 Mercury and old Moon at sunrise
4 New Moon - 2:12 pm EDT
6 Crescent Moon hovers left of Saturn
8 National Astronomy Day
8 Moon approaches Aldebaran
10 First Quarter Moon
12 NJAG Business Meeting, 8pm
14 Jupiter, Saturn and Mars in most compact visible grouping isince 1901
15 Mars passes 2.3˚ N of Saturn
18 Full Moon
20 Passover
23 Easter
26 Last Quarter Moon
30 Mars near Pleiades in WSW45 mins after sunset