



The Warren Astronomical Society Paper

P.O. Box 1505

Warren, Michigan 48090-1505

www.boonhill.net/was

Volume 36, Number 4 //

2004 WAS OFFICERS

\\ April 2004

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 2nd VP (observatory chairperson)
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The WASP (*Warren Astronomical Society Paper*) is the official monthly publication of the Society. Each new issue of the WASP is mailed to each member and/or available online www.boonhill.net/was. Requests by other Astronomy clubs to receive the WASP, and all other correspondence should be addressed to the editor, Cliff Jones, email: cliffordj@ameritech.net

Articles for inclusion in the WASP are strongly encouraged and should be submitted to the editor on or before the first of each month. Any format of submission is accepted, however the easiest forms for this editor to use are plain text files. Most popular graphics formats are acceptable. Materials can be submitted either in printed form in person or via US Mail, or preferably, electronically via direct modem connection or email to the editor.

Disclaimer: The articles presented herein represent the opinions of the authors and are not necessarily the opinions of the WASP or the editor. The WASP reserves the right to deny publication of any submission.



Astro Chatter

by Larry Kalinowski

It's the beginning of April and I can just feel that observing weather start to creep up in my bones.

Daylight savings time is just around the corner, making everything in the darkening sky move an hour later. But that's OK, it's worth waiting for the warmer weather.

April 24 is A-day. That's Astronomy day, the day all amateurs dust off their telescopes and show them off to the public. Cranbrook will be inviting the public that Saturday afternoon (between one and four o'clock) to view the Sun and answer any questions about astronomy, telescopes and other related questions. If solar and daytime planet viewing is hampered by poor weather, there will be displays indoors, within the museum. If you live in or near the area, please consider bringing your 'scope and join the rest of the amateur astronomers across the country that will be doing the same at other public places.

If you're an east-sider, join us at our club's Stargate observatory in the evening. The observatory is located on the grounds of Camp Rotary, on the property of Wolcott Mills Metro Park, just east of the corner of 29 Mile Road and Wolcott. The club will have an open house at our observatory, as well as a few telescopes set up around the site for public viewing. Look for the Rotary Camp sign and turn in. The observatory is located about 1,000 feet from the entrance, on the right. Members are asked to park just off the road or north of the dome. Mobile homes and campers are asked to park east of the dome.

Another planet has been discovered out where the Kuiper and Oort belts meet. About 8 billion miles from the Sun. You know, that region beyond Pluto that holds material that is too far away for our optical telescopes to see but still is detectable with telescopes that can see low frequency infra-red wave lengths. That's where heat can be seen, and our new discovery was seen producing heat well above the background of

space. The new planet, named Sedna, after the Inuit Goddess, is estimated to have a diameter around 8 to 12 hundred miles. Easily out ranking Ceres, our biggest asteroid. This would qualify it as the tenth planet if you accept it as a planet. It's going to bring up the controversy of whether Pluto is a planet again, you can be sure. As I've said before, if it meets the LFK criteria as round or basically spherical in shape, I'd call it a planet. If it's shaped like a potato, then it's got to be something else, like an old comet or asteroid.

During the month of April, Comet Linear will increase in brightness from fourth to almost first magnitude, according to the ephemeris I have. Maximum brightness occurring in the morning sky, before dawn, late in the month. With the beginning of May, Comet Neat makes its appearance in the western sky, in the evening, just hugging the horizon. It'll be around magnitude 2 at that time, quickly rising higher into the sky as it approaches zero magnitude around the middle of the month.

The GLAAC (Great Lakes Amateur Astronomy Clubs) group has announced who the speakers will be for the Kensington Metro-Park "Astronomy On The Beach" star party on May 21 and 22. Friday evening the speaker will be Astronaut Tony England, from NASA and Saturday's speaker will be Dr. Patricia Santy, also from NASA. She is a crew surgeon for the astronauts. The main featured astronomical object, on both days, will be Comet Neat, along with Jupiter, Saturn, Venus, Mars and Mercury. The comet will be projected on a large screen so that many can see it all at once in the viewing area, just as Mars was projected, last year, during its close approach to Earth. The speakers will be there, talking, rain or shine, under the protective canopy of the pavilion at The Martindale Beach site. Hot food and drinks will be sold at the usual park prices. The usual park entrance fee may be charged, however, it never has been, in the past. The last few years have drawn over a thousand people each night, with the highest total attendance occurring last year, nearing 5,000 per night. Mars was the crowd draw last year. Whether a comet will bring as many people out this time, we shall see.

Bill Beers has announced the existence of The Third Annual Cadillac West Spring Star Party. It occurs the weekend before the GLAAC Kensington Star Party, May 13 through 16, Thursday through Sunday. Bill's dark site is located 14 miles west of Cadillac, Michigan, at their cabin. You must RSVP for a map. Limited floor space is

available in the cabin, as well as plenty of space for tents and campers. Three motels are available: Gartlets Motel, 231-862-3500, five miles west; Hillside Inn, 231-862-3723, one mile east and Caberfae Peaks, 231-862-3300, one mile east. For more information, contact Bill at 586-566-8367 or e-mail him at beezoll@aol.com. There will be a "Find Pluto" event to spur observing and two comets to wet your appetite, so don't forget your telescope and your camera.

According to Doug Bock, there won't be a public star party, this year, at the Island Lake State Park. That star party was hosted by the Ford Amateur Astronomy Club, the state park and Rider's hobby shops. Hopefully, it'll be back next year. The Ford club and Rider's will be active with the Kensington event.

Another amateur astronomer has made news by discovering a brand new nebula. That's right, it appeared in the sky because a star buried within it began to excite the gas with radiation. That nebula was totally dark and undetected a year ago. Jay McNeil, of a Kentucky astronomy group, recognized a new nebula in the sky just southeast of M78. He photographed it and reported its presence to the professionals and had it verified. Needless to say, the Kentucky group is mighty proud of their member. Right now it carries the name, the McNeil Nebula.

Scheduled speakers for the month of April are Steve Utti and Paul Strong. Steve hasn't announced what his subject will be at the April 5 Cranbrook meeting but you can bet it will be a stimulating talk, as his past talks have been. The following week, on April 15, at the MCCC, our college hosts, Paul Strong and associates will make a demonstration that has been waited for quite some time. A laboratory apparatus will be set up to demonstrate how to measure the speed of light. On May 3, at the Cranbrook Meeting, Mike Best, will talk about SETI, the Search for Extraterrestrial Intelligence.

The April computer group meeting is scheduled for April 22 (the fourth Thursday of the month) at Gary Gathen's home in Pleasant Ridge. He lives at 21 Elm Park Rd., three blocks south of I-696 and about a half block west of Woodward Ave. Meetings will start at 8:00 pm. You can reach him at 248-543-3366 for any further information.

The club is in need of a replacement battery for its laptop, which is used by the club treasurer for

club business. It's an IBM Thinkpad, model 702C. A new replacement NIMH battery runs about a hundred dollars. If you have one that's still in working condition, contact our treasurer, or me, to discuss a transaction that will satisfy everyone.

See you on Astronomy Day, Saturday, April 24, at the public star party our club will present to the public at Stargate Observatory.

MINUTES OF MEETINGS
By Bob Watt, secretary
Cranbrook Meeting 02/16/04

Meeting started at 7:35 PM

Members present 35

Visitors 1 Doug Braun

Ken Bertin, president opened with introduction of officers.

Norman Dillard, 1st vice president, gave a rundown of speakers. A good omen, we have an abundance of speakers.

Riyad Matti, 2nd vice president, there will be open house at Stargate the next two weekends.

Jim Shedlowsky, treasurer, the treasurer change over is going well.

Gary Gathen, computer sub group, the meeting day will be the 4th Thursday, 8:00PM

Dave D`Onofrio, special events, the Kensington outing will be May 21 & 22

Marty Kunz, Solar sub group, there will be an Astronomy Day at Stargate & Cranbrook on April 24.

Notes, Ken Chrysler, there will be 3 moons of Jupiter casting shadows at once at 3 AM on March 28

The break was 8:55 to 9:15 PM

Tonight's program was "Binoculars" by Bob Johnson, well done & very interesting.

Meeting ended at 10:10 PM

MINUTES OF MEETINGS
By Bob Watt, secretary
Cranbrook Meeting 03/18/04

Meeting started at 7:35PM

Visitors 0

Members 39

President Ken Bertin opened the meeting with officer reports,

1st vice president Norman Dillard, the program speakers list is full, openings for 2005 are now available. This is a first, a good sign.

2nd vice president, Riyad Matti, the sub group "Beginners" is due to start soon.

Treasurer, Jim Shedlowsky, we are going to accept ads for the WASP.

Ken, the computer sub group will meet at Gary Gathen's home on April 22 at 8:00 PM.

Librarian, Steve Uitti, a book has been contributed to our library, "From quarks to the cosmos", by Leon Lederman, Doner Don Lemons.

Observations, too many to name.

The break- 8:55 to 9:05

Tonight we had two speakers, Dave Bailey, "Your scopes exit pupil" & Guy Maxim on "The beginning the end & every thing in between"



Super Large Sunspot
By Michael Robacker

Taken with a Minolta Dimage S414
on an Orion Sky Quest XT6 with solar filter

THE SWAPSHOP



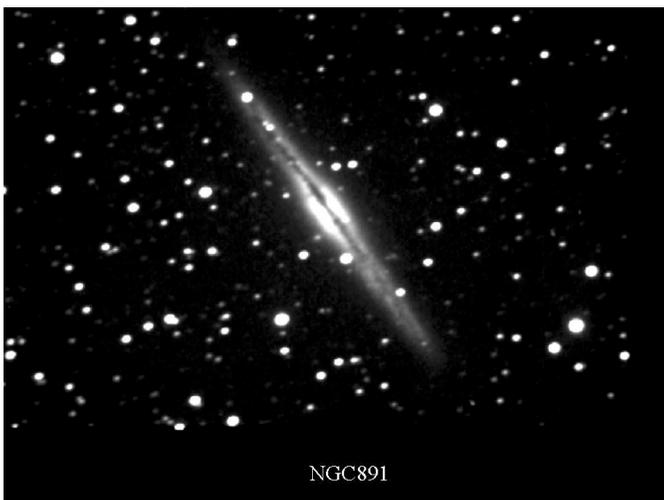
This column is for those who are interested in buying, trading or selling items. Call 586-766-9720 (cometman@mybluelight.com) if you

want to put an item for sale or trade in this section of the WASP. The ad will run for six months. The month and year, the ad will be removed, is also shown.

FOR SALE. Celestron, 8 in. Schmidt Cassagrain, 9 volt electric drive, PEC (periodic error correction), four speed quartz drive, heavy duty aluminum adjustable tripod, enhanced coatings and carrying trunk. Best offer over \$669. Mike Best, starmikebest@aol.com. (8-04).

FOR SALE. Classic 6 in. Criterion RV-6 Dynascope., Newtonian reflector, 110v AC electric drive, aluminum pier with three feet, 6x30 two ring finder and rotating tube. Best offer over \$359. starmikebest@aol.com (8-04).

FOR SALE. Refractor, 3 in., metal tube, 1 ½ in. two ring finder scope, 2 in. tracking erecting eyepiece telescope, Eastman Kodak Aero-Ektar 7.12 in. (178mm) f.l., 5x5, F2.5 camera #EM6294 (\$150 estimated value), AC heated dew shield for the 2 in. tracking scope, wood, heavy duty, surveyors tripod, two fitted wooden cases, two boxes of machine equipment tools for telescope construction. No mount. Best offer over \$439. starmikebest@aol.com. (8-04).



NGC891

NGC 891 by Phil Martin

UPCOMING WASP EVENTS

Apr	Mon 5	7:30 pm	Cranbrook Meeting
Apr	Thurs 15	7:30 pm	Macomb Meeting
	Sat 24	Afternoon Evening	Cranbrook/observe sun Stqrgate/openhouse
May	Mon 3	7:30 pm	Cranbrook Meeting
May	Thurs 20	7:30 pm	Macomb Meeting
	Fri 21	Evening	Kensington Metro Park
	Sat 22	"	Astronomy on the Beach
Jun	Mon 7	7:30 pm	Cranbrook Meeting
	Thurs 17	7:30 pm	Macomb Meeting
Jul	Mon 5	7:30 pm	Cranbrook Meeting
	Thurs 15	7:30 pm	Macomb Meeting
Aug	Mon 2	7:30 pm	Cranbrook Meeting
	Thurs 19	7:30 pm	Macomb Meeting
Sep	Mon 6	7:30 pm	Cranbrook Meeting
	Thurs 16	7:30 pm	Macomb Meeting
Oct	Mon 4	7:30 pm	Cranbrook Meeting
	Thurs 21	7:30 pm	Macomb Meeting
Nov	Mon 1	7:30 pm	Cranbrook Meeting
	Thurs 18	7:30 pm	Macomb Meeting
Dec	Mon 6	7:30 pm	Cranbrook Meeting
	Thurs 16	7:30 pm	Holiday Awards Banquet

Scheduled Speakers 2004

DATE	DAY	PRESENTER	SUBJECT
4/5/2004	MON	TBA	TBA
4/15/2004	THU	Paul Strong	Speed of light Demo.
5/3/2004	MON	Mike Best	S.E.T.I.
5/20/2004	THU	Vince Chrisman	Radio Astronomy
6/7/2004	MON	Jim Shedlowsky	Iridium Flares
6/17/2004	THU	Ken Bertin Larry K.	Transit of Venus Name that Nebula
7/5/2004	MON	Alan Rothenberg Jim Ehlers	Albion Observatory Restoration
7/15/2004	THU	Alan Kaplan	Globular Clusters
8/2/2004	MON	Riyad Matti	TBA
8/19/2004	THU	Gary Ross	Will Thompson Hay
9/13/2004	MON	Phil Martin	Quantum Mechanics
9/16/2004	THU	Ed Starback	Pluto
10/4/2004	MON	Tom Hagen	McMath-Hulbert Observatory
10/21/2004	THU	Steve Uitti	CUSKY
11/1/2004	MON	Planetarium	Cranbrook Sky Show
11/18/2004	THU	Dave D'Onofrio	Processing CD Images
12/6/2004	MON	Richard Szumanski	Meteors/Comets/ Deep Sky
12/16/2004	THU	Fred Espenak-NASA	Eclipses

April Calendar

Friday, April 2

- 2:00 pm: The Moon passes 3° north of Jupiter

Monday, April 5

- 7:03 am: Full Moon

Wednesday, April 7

- 1:00 am: Mars passes 7° north of Aldebaran
- 10:25 pm: The Moon is at perigee (226.519 miles from earth)

Sunday, April 11

- 11:46 pm: Last Quarter Moon

Wednesday, April 14

- 12:00 am: The Moon passes 5° south of Uranus

Friday, April 16

- 6:00 am: Venus passes 10° north of Aldebaran

- 9:00 pm: Mercury is in inferior conjunction

Monday, April 19

- Partial Solar Eclipse
- 9:21 am: New Moon

Thursday, April 22

- 2:00 am: Lyrid meteor shower

Friday, April 23

- 6:00 am: The Moon passes 1.5° south of Venus
- 5:00 pm: The Moon passes 2° north of Mars
- 8:25 pm: The moon is at apogee (251,906 miles from Earth)

Sunday, April 25

- 2:00 pm: The Moon passes 5° north of Saturn

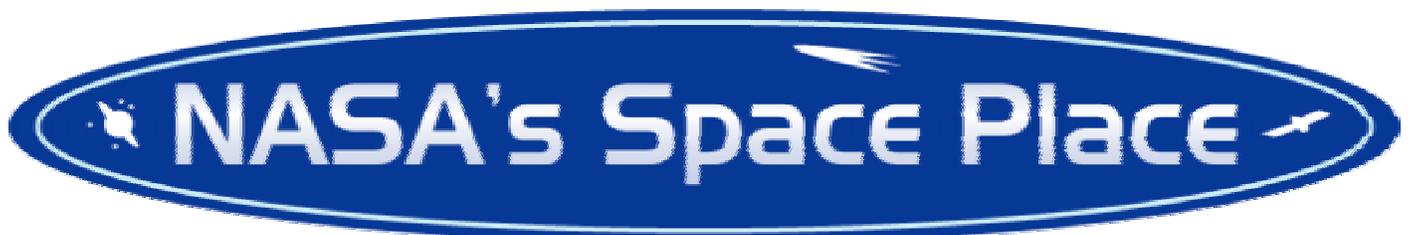
Tuesday, April 27

- 1:32 pm: The First Quarter Moon

Thursday, April 29

- 10:00 pm: The Moon passes 4° north of Jupiter

Calendar courtesy of Jim Mills – Check out his web site at: <http://www.njnightsky.com>.



Article Compliments of Nancy Leon of JPL/NASA

Sciencecraft

by Patrick L. Barry and Tony Phillips

Probes that can distinguish between "interesting" things and "boring" things are vital for deep space exploration, say JPL scientists.

Along with his colleagues in NASA's Space Technology 6 Project (ST6), JPL's Steven Chien is working to develop an artificial intelligence technology that does just that. They call it the Autonomous Sciencecraft Experiment, and it's one of many next-generation satellite technologies emerging from NASA's New Millennium Program.

As humanity expands its exploration of the outer solar system-or even neighboring solar systems!-the probes we send suffer from two unavoidable handicaps. First, commands radioed by mission scientists on Earth take a long time to reach the probe: six hours for the planned New Horizons mission to Pluto, for example.

Second, the great distance also means that data beamed back by the probe trickles to Earth at a lower bandwidth-often much less than an old 28.8 kbps modem. Waiting for hundreds or thousands of multi-megabyte scientific images to download could take weeks. And often many of those images will be "boring," that is, they won't contain anything new or important for scientists to puzzle over. That's certainly not the most efficient way of using a multi-million dollar probe.

Even worse, what if one of those images showed something extremely "interesting"-a rare event like a volcanic eruption or an unexpected feature like glaciers of methane ice? By the time scientists see the images, hours or days would have passed, and it may be too late to tell the probe to take a closer look.

But how can a probe's computer brain possibly decide what's "interesting" to scientists and what's not?

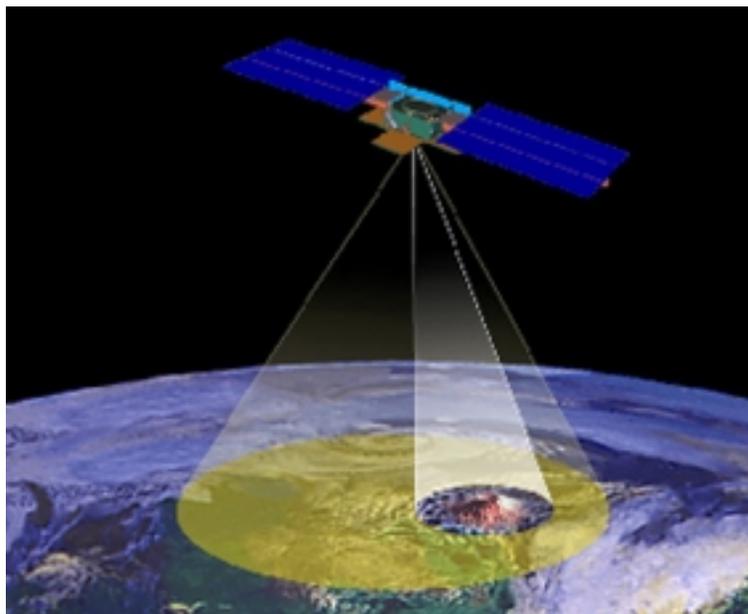
"What you really want is a probe that can identify changes or unique features and focus on those things on its own, rather than just taking images indiscriminately," says Arthur Chmielewski, one of Chien's colleagues at JPL.

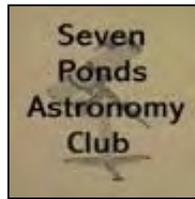
Indeed, that's what Chien's software does. It looks for things that change. A mission to Jupiter's icy moon Europa, for instance, might zero in on newly-formed cracks in the ice. Using artificial intelligence to set priorities, the probe could capture a complete movie of growing fractures rather than a single haphazard snapshot.

Until scientists can actually travel to deep space and explore distant worlds in person, they'll need spacecraft "out there" that can do some of the thinking for them. Sciencecraft is leading the way.

Learn more about Sciencecraft at nmp.nasa.gov/st6. Kids can make a "Star Finder" for this month and learn about another of the ST6 technologies at spaceplace.nasa.gov/st6starfinder/st6starfinder.htm.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration





PRESENTS

The 3rd Annual
CADILLAC WEST – SPRING
“FIND PLUTO”
STAR PARTY

(Bring your charts and computers!)

May 13 – May 16, 2004

Hosted By: Bill Beers (Warren Astronomical Society)

Located 14 Miles West of Cadillac Mich. at Bill Beers Cabin (RSVP for Map)

*****DARK SKIES*****

Accommodations Available:

Limited Floor Space in Cabin

Plenty of Space for Tents/Campers

Garlets Motel (231-862-3500) 5 miles west

Hillside Inn (231-862-3723) 1 mile east

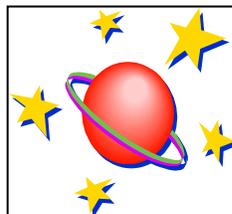
Caberfae Peaks (231-862-3300) 1 mile east



----- A/C POWER AVAILABLE -----

For More Info Contact: Bill Beers Phone #586-566-8367 or E-mail “beezoll@aol.com”
John Lines Phone #248-969-2790 or E-mail “jelines@yahoo.com”
Doug Bock E-mail “dbock1@chartermi.net”

(PLEASE RSVP IF YOU ARE PLANNING ON ATTENDING)



If you would like to renew your membership and have not already done so, or if you would like to become a member of the Warren Astronomical Society, please complete the following and submit with the appropriate US funds by Check or Money Order.

Membership	Definition	Dues (US Funds)
Student	One person under 18 years of age enrolled in grades 1-12	\$17.00
College	One person attending a College or University	\$22.00
Sr. Citizen	One person 65 years of age or older	\$22.00
Family	More than one person living at the same address	\$37.00
Individual	One person not fitting a category above	\$30.00

Fill in the WAS application and send it to our current Treasurer:

- **Jim Shedlowsky**
- **c/o Warren Astronomical Society**
- **P.O. Box 1505**
- **Warren, Michigan 48090-1505**

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Warren Astronomical Society

Membership Application

About You:

DATE _____

Name(s): _____

Address: _____

Telephone: _____

E-Mail: _____

Membership Type:

Individual \$30.00 _____

Family \$37.00 _____

College Student \$22.00 _____

Student \$17.00 _____

Sr. Citizen \$22.00 _____

Magazine Subscription:

Sky and Telescope \$32.95 _____

Astronomy \$29.00 _____

TOTAL \$ _____

WARREN ASTRONOMICAL SOCIETY
P.O. BOX 1505
WARREN MICHIGAN 48090- 1505



TO:

The society holds meetings on the first Monday and the third Thursday of each month, starting at 7:30 pm.

First Monday meeting:

Cranbrook Institute of Science
1221 North Woodward Avenue
Bloomfield Hills, Michigan

Third Thursday meeting:

Macomb Community College
South Campus, Bldg B, Room 209
14500 Twelve Mile Rd
Warren, Michigan