# SF

Supernova SN 2011fe - A Personal Observation...By Rick Kazmierski

# Northern Cross Science Foundation Newsletter

# October 2011

# LOOKING UP

## October 6 Thursday

**General Meeting** 

7:00 p.m. - Astronomy 101 7:30 p.m. - Main Program **Business Meeting to follow** 

### October 8, Saturday

Solar Viewing 9:00 a.m.- 4:00 p.m. Pike Lake State Park

# October 12, Wednesday

**Richards Elementary** School 6:00 p.m.- 8:00 p.m. Whitefish Bay

# October 15, Saturday

Luminary Walk 7:30 p.m. - 10:30 p.m.

LacLawrann Conservancy

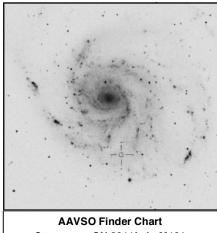
# October 20, Thursday

**Board Meeting** 7:30 p.m. Home of Joyce Jentges

## October 22, Saturday

**Haunted Hike** 6:00 p.m. Harrington Beach

# October 28, Saturday **Great Pumpkin Event** 6:00 p.m. **Bayshore Town Center**



Supernova SN 2011fe in M101

Astronomy offers many areas of interest to amateurs. One of the areas that has always fascinated me is planetary nebula, and in particular, supernova. So much so, some years ago I signed up for several online news bulletins, alerting me of current astronomical phenomena which otherwise would escape my notice. Often, supernovas are discovered with CCD Cameras and are too dim for observing with an amateur telescope. However, once in a while a supernova is discovered that brightens enough to be visible in backyard scopes and is reasonably placed in the sky for viewing from our location. Such an object is the recent supernova SN 2011fe, discovered in M101 located in Ursa Major. I was alerted in a "SkyandTelescope.com" Weekly Bulletin.

Supernova SN 2011fe was first observed in images taken with the 48" Schmidt telescope at Palomar Observatory on August 22<sup>nd</sup>. It was discovered less than two hours of it occurrence and was brightening rapidly. It had climbed from a limiting mag 20 to mag 12.4 buy August 27<sup>th</sup>, well within the reach of amateur telescopes. This is amazing, since this star is 30 Million Light Years distance yet outshines its parent galaxy. It was believed to have peaked on September 9th when it reached 10th magnitude. The discovery of the supernova is particularly important

because it is a type 1a supernova - the kind used by scientists to measure the expansion of the Universe. Astronomers say it could be a once in a lifetime chance to see a supernova of this kind blossom and then fade before their eyes; we may not see another one like it for another forty, or perhaps over a hundred, years!'

The prospect of viewing and possibly imaging a bright SN from our backyard was exciting. On Friday, August 26th about 11/2 hours after sunset I found SN 2011fe with my 14" Schmidt-Cassegrain. It was nearly the brightest star in the field, although positively identifying it took a bit of patience. I was viewing through a wispy cloud cover, looking for a galaxy which has a low surface brightness; plus the object was in the Northwest, which puts it in the glow of West Bend from my location. After some disorientation. I was able to observe the nucleus of M101, and using finder charts from the web, was easily able to identify the supernova.

At the time of publication (September 24th), the supernova had dimmed to a magnitude 11.5, but still visible in small telescopes. However, if you plan to view the supernova, better look this month. It is lower in the northwest each night and continues to dim in magnitude.

This type of observation is what brings special meaning to observational Astronomy for me. Witnessing a transitory event like a supernova, with such power and impact on its parent galaxy, is exciting. Even though SN 2011fe just appears as another random star in the telescope, knowing its true significance makes the observation worth the effort. I was able to do some imaging of M101 over the days to follow, and once developed, compared the image to one I'd taken in March of this year. There was the supernova, big and bold! I knew it would be there, but verifying this with my own resources made the discovery feel like I was an integral part of it.

## September Meeting Minutes

#### By Kevin Bert

The September Business meeting of the Northern Cross Science Foundation was held at Unitarian Church North. President Joyce Jentges opened the meeting at 7:45 pm and welcomed 15 members and guests. She said that we had a very busy month and the amount of activity will continue in September. She then asked for standard reports.

Gene Dupree gave his treasurer report. He reported that liability insurance now costs \$744.00 for a year's coverage.

Secretary Kevin Bert noted Tyler Ross from Germantown had just become a member at the current meeting and was welcomed. Kevin gave a reference to the quarterly Reflector magazine and the outreach material that was now available. He asked members to contact him if they are not receiving this Astronomical league newsletter.

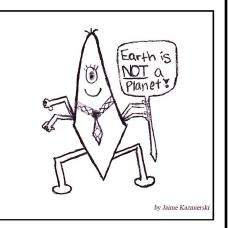
Under Old business Joyce said that there

was not much movement on the observing mound project. She will be waiting for a quote from her brother who has a landscaping business and has been helpful in coming up with alternative construction ideas for the project. The Cassegrain secondary is also waiting for quotes. Based on the responses the focus will shift to one of these projects. The NCSF board decided not to exceed \$3000.00 for the secondary.

Joyce continued on with a list of upcoming NCSF events. September 3 is an evening of viewing at the Ice Age Center. The 7<sup>th</sup> is sidewalk astronomy at Bayshore. The 10<sup>th</sup> is an evening at Pike Lake State Park. The 16 and 17 are PVN's at Harrington Beach. September 30 and October 1<sup>st</sup> are PVN's evenings also. The 24<sup>th</sup> is a brief program followed observing at The Bog. Telescopes from members could be used at all events. Jeff Setzer and Kevin Bert followed up with some photos from the recent Northwoods Starfest.

With no further business Joyce closed the meeting at 8:35 pm.

# Astro Humor



Several weeks ago I challenged our granddaughter, Jamie (who is 12 years old) to create a drawing of an "alien holding a sign". I had a cartoon idea I was considering for the Spectrum, but alas, I'm no artist. She did a great job of putting the idea on paper!

# Things to See In the October 2011 Night Sky By Don Miles

Saturn, Venus, & Mercury: All three follow the Sun closely, but Venus is the only one of the three you can see early in the month. Saturn works its way around the back side of the Sun, so won't be visible now. Mercury starts the month too close to the Sun to be seen, but will slowly lag further and further behind the Sun to eventually be seen late in the month still as an evening object. Venus is also close, but stays far enough away (and will also continue to lag further and further) behind the Sun, so it stays an evening object also. By the 31st, Mercury will have fallen so far behind the Sun that it will now be very close to Venus (about 2 deg). Use much brighter Venus (-3.9) to as a guide to see Mercury (mag -0.3), which will be below and to the right of Venus.

*Pluto:* Look for Pluto still in the constellation Sagittarius just as it gets dark. It will be highest in the sky as the Sun sets and will set around 9:30pm.

Neptune & Uranus: Neptune (mag 7.9) still straddles the border of the constellation Aquarius & Capricorn, and will move very little throughout October. It's best seen about 8pm. Uranus (mag 5.7) rises about an hour after Neptune, and is just to the East of the lower "fish" in Pisces. Look for a blue-green color to it.

Jupiter: Now at (mag -2.9), Jupiter rises at about 8pm early in the month, and by about 6pm by months end. Look to the East for the brightest "star" in the sky. that will be Jupiter. It will slowly drift to the west towards Pisces. The best time to see it will be about midnight, as it will be highest in the sky then, but will be up all night this whole month. It will reach opposition the night of the 28th. Considering there isn't much else to see planetwise, this would bee the perfect month to concentrate on Jupiter. There is much to see, as it is a big object already, and you don't need expensive equipment to enjoy it. Check on-line, or recent astronomy magazines for dates/times of the many transits/occultations of Jupiter's moons... there seems to be something happening all the time. Even the bright Moon doesn't stop the show, so you can't pick a bad night to view.



*Mars:* Rises about 2am in the constellation Cancer, and will drift eastward into Leo on its way to a very close pass of Regulus (just over 1 deg) on the 10th of November. Mars is at (1.2 mag), so is for sure observable, but is very small and hard to see any detail. The next opposition will happen in spring of 2012 (March).

Moon:

October 3rd: First Quarter October 11th: Full Moon October 19th: Last Quarter October 26th: New Moon

#### Special Events:

There are a couple of meteor showers happening this month, but only one worth mentioning (that won't be washed out by the Moon). Those would be the Orinids, and they originated from "Halley's Comet". They typically have a yellowish hue to them, and move very fast with predicted peak rates of 30-40/ hr. The last quarter Moon rises late, but shouldn't cause much of a problem.

# **October General Meeting**

101 Class... by Kevin Bert

#### "Upgrading Your Small Telescope"

Experienced observers will tell you here is a lot of viewing potential in small telescopes. Unfortunately there are frustrations with many that are made poorly and are not up to the task. There are a number of things that can be done to improve the weak performance of a typical inexpensive telescope and you do not have to bust your budget to do it. Discover some tricks in upgrading a performance challenged telescope.

#### Constellation of the month: "ARIES"

### Main Program by Jeff Setzer

#### "Sir Patrick Moore:

#### <u>The Most Famous Amateur Astronomer</u> <u>You've Barely Heard Of".</u>

Sir Patrick Moore is a British amateur astronomer who has attained prominent status in astronomy as a writer, researcher, radio commentator and television presenter of the subject. He has authored over 70 books on astronomy, and presenter of the longest-running television series (same presenter) in the world, *The Sky at Night*. Jeff will discuss the life and accomplishments of this fascinating amateur astronomer.

# September Events

#### Dundee Ice Age Center September 3

#### Reported by Charlotte DuPree

We were clouded and then rained out this night. Jeff Setzer had his computer along, so he was able to fill in for the cancelled speaker. He presented a program on the different types of objects amateur astronomers like to view.

#### Bayshore September 7

#### Reported by Jeff Setzer

Bayshore went well, and we were able to show about fifty people the Moon, Beta Cygni, and NGC 457. Thanks to Justin Modra, Robert Radke & Don Miles for helping out!

#### Community Campfire September 10

Reported by Charlotte DuPree

The Friends of Pike Lake annual Community Camp Fire had clear skies with a rising Moon. We had over 300+ people visit telescope row. When I talked to the Park Ranger ,they estimated 450 people attended the campfire. In a thank you letter I received from Joe, he commented that they receive many phone calls, the week before any of the events, wanting to know if the people with the telescopes will the there. We have a following! Thanks to AI Steinberg, Gail and Harvey Sherman, Tony Marek, Carol Nelson, Rick and Georgine Poulin. We had lines waiting at all of the scopes all night.

#### Public Viewing September 16

#### Reported by Rick Kazmierski

Cloudy skies and scattered rain showers put a damper on this Public Event at Har-

rington Beach. There were 10 visitors from the campground who were disappointed but said they would return on Saturday. To the delight of those attending, Nick Kazmierski demonstrated his I-Touch Astronomy Application. We closed the Observatory at 9:45pm.

#### Public Viewing September 17

#### Reported by Charlotte DuPree

Public solar and night viewing at Harrington Beach was open from 3:00 to 11:00. We had a very good crowd during the afternoon around 60visitors, most of them had stopped by on cloudy Friday night. Since there was a candle light hike that night, we again had a waiting line going out the door and around the corner 300+! With the big crowd we stayed on M13. We were able to look at comet c/2009 Garradd for the last hour. We saw a moon transit on Jupiter, and looked at Uranus. Kevin and Dan had the 10 inch dob and the 6 equatorial mount, observatory scopes outside, and Gene was working with the 9 1/4 Schmidt-Cassegrain. Al Steinberg and others had their scopes set up outside.

#### Cedarburg Bog September 24

#### Reported by Kevin Bert

The evening at the Bog started out overcast and only half a dozen people out of the 40 that signed up were in attendance. At the conclusion of the meteor shower program the skies surprisingly cleared and we identified objects with laser pointers and had some great views through scopes set up by Dan Bert, Jeff Setzer and Gene Dupree.

# CURRENT CLACK

#### New Members

NCSF Welcomes "New Club Members"

**Tyler Ross** 

**Steve Diesso** 

Arthur Goetsch III

#### Leaders for Public Viewing

October 8

Solar Viewing Gene and Charlotte DuPree

#### October 12

Richards Elementary School Jeff Setzer

#### October 15

LacLawrann

Becca Setzer

#### October 22

#### Haunted Hike

Gene and Charlotte DuPree

#### October 28

Bayshore Town Center Jeff Setzer

## Jim and Gwen Plunkett Observatory



Observatory Director: Dan Bert: 262-375-2239 SPECTRUM 5327 Cascade Drive West Bend, WI 53095





# 2011 BOARD OF DIRECTORS

President—Joyce Jentges 102 N. Montgomery St. Apt #1 Port Washington, WI 53074 262-483-4270 joycejentges@hotmail.com

Vice President - Jeff Setzer 1418 Trillium CT West Bend, WI 53095 262-338-8614 astrosetz@hotmail.com

Secretary - Kevin Bert 2292 Ridgewood Road Grafton, WI 53024 262-375-2239 kevin.bert@hotmail.com

Treasurer - Gene DuPree 6219 Jay St. Myra, WI 53095 262-675-0941 grdupree@charter.net

Rick Kazmierski 262-305-1895

Don Miles 262-675-2796

Tony Marek 414-354-6076

Newsletter Editor & Publisher Rick & Mickey Kazmierski 262 305-1895/ rickkaz@charter.net Annual NCSF Banquet February 2, 2012 Fox and Hounds Restaurant

Hubertus.





With the end of the Public Viewing Season at hand it's not too early to start thinking of good conversation, laughter and delicious food, all in a warm beautiful holiday atmosphere. Following record attendance at last years Banquet, we will again be hosting it at the Fox and Hounds in Hubertus. So mark your calendars now and watch the Spectrum for registration forms.

## From the Editor

As editor of the Spectrum, I would like to invite members to consider submitting articles for publication in the Newsletter. I am always amazed at the variety of ways we find to enjoy Astronomy. Whether it be observational, photographic, a love of meteorology, public outreach, telescope making, etc. we each share a passion for some aspect of the science. Why not share that interest with the rest of the Club's membership. You can submit articles to Rick Kazmierski (<u>rickkaz@charter.net</u>) or call me at 262 305-1895 for more information.

Our club has a "Discussion Group on Google" See our website: <u>http://www.ncsf.info/</u> for details.

# SPECTRUM

Is published by the Northern Cross Science Foundation, Inc. A nonprofit organization based the state of southeastern Wisconsin and is a Member of the North-Central Region of the Astronomical League.



The NCSF supports the International Dark sky association.



Send inquiries to: SPECTRUM 5327 Cascade Drive West Bend, WI 53095

This Issue, along with back Issues of SPECTRUM, can be found on the NCSF Web Site.

http://www.ncsf.info

Monthly Meeting Location Unitarian Church North 13800 N. Port Wash. Rd. Mequon, WI 53097