SPECTRUM

Northern Cross Science Foundation Newsletter July 2010

LOOKING UP

July 1, Thursday

General Meeting

7:00 p.m. - Astronomy 101

7:30 p.m.. - Main Program

Business meeting to follow

July 15, Thursday

Board Meeting

7:30 p.m.

Home of Joyce Jentges

July 16, Friday.

Public Viewing

7:00 p.m.

Harrington Beach

July 17, Saturday

Solar\Public Viewing

4:00 p.m.

Harrington Beach

July 21, Wednesday

Sidewalk Astronomy

7:00 p.m.

Bayshore Town Center

August 5, Thursday

General Meeting

(Programs to be announced)

Astronomy Podcasts... *by Justin Modra*

Podcasts offer great ways to learn more about astronomy and science. There are many excellent podcasts that offer in-depth discussions on specialized topics. In this article, there will be an introduction to podcasts, a discussion of how to get started listening to podcasts and a brief discussion of three of my favorite science podcasts for people of all backgrounds: from novice to experienced.

A podcast is a "taped" or "not live" digital media file (audio or video) which can be played on a computer or digital media player. The word podcast is a combination of "I**pod**" with "broad**cast**". The word is somewhat misleading, because you don't need an Ipod or other portable media player. Also, you don't have to be a computer expert to enjoy podcasts. All you need is access to a computer and the internet and you can start learning more right away.

Most websites that offer podcasts allow the files to be played on their website without any additional software. However, it is very convenient to have software that automatically grabs the episode when a new episode is broadcast on the internet. Apple's Itunes is a good piece of software for this purpose, although many others are available. Itunes has well written help menus which discuss how to subscribe to podcasts and most times you can subscribe with a single mouse click.

Next is a discussion of some of my favorite science and astronomy podcasts. A good place to start is The Astronomy Cast at www.astronomycast.com. This is a very well produced and engaging podcast. Each show begins with the host Fraser Cain asking Dr. Pamela L. Gay a few questions about a subject. Dr. Gay then provides an interesting lecture on many diverse topics. During the lecture, Cain will ask insightful questions which results in bringing advanced topics down to a more understandable level. Recent show series included "Mysteries of the Solar System" and "Mysteries of the Universe". In these episodes, Dr, Gay and Cain discussed the mysteries that scientists don't know the answers to and are directing their research toward. A new episode of The Astronomy Cast is broadcast every week and each show is about half an hour long.

A discussion of astronomy podcasts would be incomplete without mentioning the irreverent, fun and casual Slacker Astronomy podcast at www.slackerastronomy.org. The show has a very free flowing feel to it. Most shows begin with a brief discussion of current astronomy events, then a taped interview and then a follow up discussion. Currently the show is hosted by Michael Koppelman, Dr. Doug Welch and Mike Simonsen. Although they call themselves slackers, they aren't slacking on generating excellent episodes and interviews. The Slacker Astronomy podcast has been consistently getting better and better over the last few years, but they have ascended to a new level with the introduction of Simonsen's interviews. I highly recommend that you go back through the archives and listen to the interview with Dr. Edward Guinan in which the topic of discussion was the North Star, Polaris. My favorite aspect of this podcast is that there is an effective combination of professional and amateur astronomy discussion topics and interviews. Slacker Astronomy broadcasts a new 50 minute episode approximately once a month.

Finally, the last podcast in this article is the British Broadcasting Corporation (BBC) podcast "In Our Time with Melvyn Bragg". While this show is not strictly about astronomy or science, there are very interesting astronomy discussions that are occasionally broadcast. The show can be found at the following internet location: www.bbc.co.uk/radio4/features/in-our-time/. The first podcast in this discussion has one PhD, the second has one or two (depending on the interview) this podcast has a gaggle of PhDs. The unique format of IOT (In Our Time) is that *(cont'd on pg-4)*

June Meeting Minutes

By Kevin Bert

The June business meeting of the Northern Cross Science Foundation was held at the Unitarian Church North in Mequon. Vice President Jeff Setzer opened the meeting at 7:50 pm and welcomed over 30 members and guests. He told the membership that Joyce was attending a graduation ceremony and would not be able to attend tonight's meeting. Jeff then asked for standard reports.

Treasurer Gene Dupree reported a balance of $678.14 in the observatory account and $4,753.22 in the general fund. One main expense was the purchase of a Sky Commander control for the observatories 9 ¼ inch telescope.

Secretary Kevin Bert welcomed one of the clubs newest members, Bill Large, who was in attendance. There was no new information on the Astronomical League.

Under old business John Helm talked about his search for the recent Wisconsin Meteorites, and as promised last month, brought in some samples. John came up empty in his searching but gave an interesting account of people he met during the hunt. John purchased a sample of the Wisconsin Meteorite from a man in New Mexico. After talking to a land owner in the fall area John discovered that he had been searching very close to the spot where the man from New Mexico had made his find. For now the rush is over but more pieces may still be recovered.

Under new business, Jeff asked for ideas for programs and activities. The membership brought up Astrophoto topics as one choice. Field trips to a planetarium or observatory were of interest too.

Jeff Setzer covered upcoming events for June. There is a park open house at Harrington Beach State Park that will include sun viewing, PVN's on the 11, 18 and 19 at Harrington Beach and sidewalk astronomy on June 19th at Bayshore, (See Jeff for a pass to park at Bayshore). June 16th will have telescope viewing at Horicon Marsh, (see Gene or Charlotte Dupree).

With no further new business, Jeff closed the business meeting at 8:25 p.m.

Things to See In the July Night Sky *By Don Miles*

Mercury: Mercury (mag -1.8) starts the month too close to the sun to be seen, but by mid-month, will set about ½ hour after the sun sets. By the end of the month, that time increases to about an hour, giving you a little more time to pick it out of the glare. It will remain an evening object (always close to the sun) until mid September, when it will have passed around the back side of the sun to become a morning object for a while.

Venus: Brilliant Venus (mag -4.1) also trails the sun, and sets by about 11pm early in the month, and by about 9:30 later in the month. Venus begins the month between the Beehive cluster in Cancer and the star Regulus in the constellation Leo, and moves its way east towards Spica in Virgo. This is a fast moving planet that starts the month 38 degrees from Saturn, and by months end, will have closed that gap to about 8 degrees. Mars will also be in the tight triangle of the 3 planets, being only 2 degrees away from Saturn as Venus approaches.

Mars: Still dimming Mars (mag. 1.4) is still highest in the sky at sunset, and will set by about midnight, and by about 11pm by months end. Mars also slowly drifts eastward, starting from the below center in the "base" of Leo, and will work its way eastward to pass Saturn on its way eventually pass the star Spica in Virgo.

Saturn: Saturn will also be highest in the sky at sunset, sets by about 1am early in the month and by about 11pm at months end. Saturn will remain relatively stationary (at the head of Virgo) for July, and so will the tilt of the rings.

Neptune: Neptune (mag 7.8) rises about 11:30pm, and by 9:30pm towards months end. It's still noticeably different from many other faint stars, as Neptune has a greenish hue to it, and at higher magnifications show to be non-stellar.

Jupiter & Uranus: Both are pulling away from the sun, and will continue to be morning objects early in the summer. They both rise about 12:30am, and by months end will rise about 10:30. Jupiter is at (mag -2.7), and Uranus is at (mag 5.8). They start the month about 2 degrees apart, and Jupiter moves about 1 degree further to the East as the month progresses.

Moon:

July 4th: Last Quarter

July 11th: New Moon

July 18th: First Quarter

July 25th: Full Moon

Special Events:

There is only one meteor shower to watch for this month…the Delta Aquarids on the early mornings of the 27th thru the 29th. There is a predicted peak rate of 20/hr, but the just past full moon will wash out a lot of the more faint meteors. If you're on vacation, or just up in the wee hours normally during the workweek, try to remember to look for them.

For those of you rebels that won't give up on the 9-planet solar system blasphemy…the object formerly known as (Planet Pluto), can now be searched for in the constellation Sagittarius, and more specifically…about 1.5 degrees southwest of M13. This "object" is only at magnitude 14.0, so you'll probably need some good charts, dark skies, and a larger scope (perhaps the Panarusky?). Good Luck.

July General Meeting

101 Class

The July 101 class by Joyce Jentges is entitled:

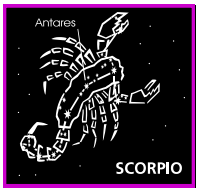
Astronomical League Observing Clubs for the Beginning Stargazer.

This Astronomy 101 will give you a quick preview of several of the Observing Clubs that are perfect for someone just starting out in the field of astronomy. These Observing Clubs will help you hone your skills and offer some challenges as well. Join us for a look at how you can complete these challenges and earn certificates and pins.

Main Program

"What Is Wrong With My Mirror?"

Our speaker for the July Main Program will be Kevin Bert. A number of tests are available for checking an optical surface. Some become difficult to interpret the results. There is one simple test that Kevin has used a number of times that can indicate what shape your telescope mirror is in. After an overview of the process, instructions will be given to you how to use the equipment to evaluate three different mirrors.



Featured Constellation: "Scorpio"

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

June Events

Sunday, June 6

Gene DuPree reported cloudy to partly cloudy skies for this Park Open House, with some lightly scattered showers. Even so, there were a couple dozen visitors and clearing at times, allowing views of several solar prominences. Several members assisted throughout the day and the event ended about 5pm.

Friday, June 11

Dan Bert reported clouds broke up as it got dark around 9pm for this Members/camper viewing night at Harrington Beach, with seven club members in attendance. A total of 6 campers enjoyed viewing Venus, Saturn, Mars, M13, M57, M80 and more for over an hour during the clearing. Clouds eventually returned around 11pm with the observatory roof closing shortly after.

Friday, June 18

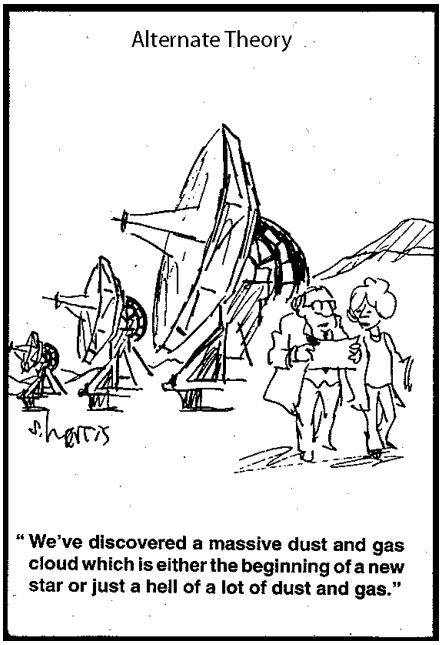
Dan Bert reported two members and five campers attended this mostly cloudy event, but were able to view the 1st quarter moon through cloud openings. A colorful sunset highlighted the evening.

Saturday, June 19

Charlotte Dupree reported four members helped with the Public Event. The guest book log 88 visitors, all campers. The skies were mostly clear with a few passing clouds. The 20 inch Panarusky looked at Venus, Moon, Saturn, M13, M57, M51, M97.

Saturday, June 19

Reportedly another very successful event under clear to partly cloudy skies. Interested shoppers were treated to both solar and evening viewing.



CURRENT CLACK

New Members

NCSF Welcomes New Club Members

Carl Eisenberg

Susan Eisenberg

Leaders for Public Viewing

July 16

Public Viewing

Leaders Needed

July 17

Solar\Public Viewing

Gene DuPree

July 21

Sidewalk Astronomy

Jeff Setzer

Star Parties

Wisconsin Observers Weekend

July 8 -10

Hartman Creek State Park, WB

www.new-star.org

Northwoods Starfest

August 13 - 15

www.cvastro.org

Prairie Skies

September 30 - October 3

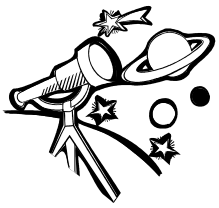
Kankakee, IL

www.prairieskies.org

Jim and Gwen Plunkett Observatory

Observatory Director:
Dan Bert: 262-375-2239

SPECTRUM
5327 Cascade Drive
West Bend, WI 53095



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(Con't. from pg-1)

Bragg collects approximately four experts on a topic and then directs a discussion. The show is very entertaining and instructive and Bragg has a retiring and agreeable interview style. In the IOT archives there are at least a 150 science related shows. Some of these include as discussion of the Relationship between Astronomy and British Imperial Expansion, Asteroids, The Cooling of the Universe, and the 18th Century Astronomer Sir William Herschel. A new 50 minute episode of IOT is broadcast every week.

Podcasts offer a great way to learn more about a unique and specialized subject, such as science and astronomy. They are available for free on the internet and are very easy to use. You don't have to be a computer expert or an Ipod owner to enjoy the entertaining, insightful and educational podcasts listed in this article. Websites that publish podcasts archive past shows, so it's very easy to browse the archives and find a podcast that you are interested in. The podcasts I've listed here have extensive archives for you to explore. Good hunting!

Astronomy Tidbit

"The chemical energy in five gallons of gasoline will take an automobile a hundred miles or so along a freeway; the nuclear energy in those same five gallons would thrust a spacecraft a hundred million miles, or all the way to Mars." (Herman Wouk "The Language God Talks")

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

SPECTRUM

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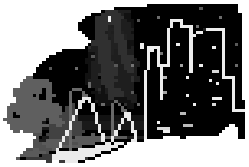

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http://www.ncsf.info