Monthly Notices of the Everglades Astronomical Society

Naples, FL
April 2010

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President's Message

Saturday April 10th, a few of our members plan to offer visitors at Corkscrew Swamp Sanctuary a look at our closest star. Weather permitting, we will show sun spots and solar prominences from 10am – 2pm. Later that evening a couple of us will honor our pledge to hold a private star party for 10 people at the Fakahatchee south site. This, along with a limo ride to the site was auctioned off to benefit the less fortunate with medical care. By the meeting we will know if the weather cooperated.

On Tuesday April 13th we will have a little different program. Five different people will speak on observing. The Earth Day celebration at the Conservancy of SW Florida will be on Saturday April 17th. We will have scopes at this event again this year.

Good skies – clean glass.
Co-President
Rick Piper

Dates for the "Fak"

Usually the best times to go out to the Fakahatchee Strand viewing site are moonless nights. Below is a list of upcoming Saturday nights that you will often find fellow club members out there enjoying the skies with you (weather permitting).

Date	Sun Set	Moonrise	Moonset
April 10	7:48pm	4:43am	4:40pm
April 17	7:52pm	8:59am	11:14pm

Sky Events

April 6 – Last Quarter Moon
April 14 -- New Moon
April 21 -- First Quarter Moon
April 28 -- Full Moon

Meteor Shower: Lyrid
Radiant and direction: Lyra (E)
Morning of maximum: Apr. 22
Hourly rate: 10-20
Parent body: Thatcher (1861 I)

Next Meeting

April 13, 2010
Time 7:00 – 9 pm
At the Norris Center, 755 8th Avenue South, Naples, FL

Astronomical Trivia Question of the Month

Which star has the greatest apparent motion (proper motion) against the background stars in the night sky?

a. Polaris
b. Mizar
c. Barnard's Star
d. Gemini

Answer on next page.

NASA Space Place

Deadly Planets

By Patrick L. Barry and Dr. Tony Phillips

About 900 light years from here is a rocky planet not much bigger than Earth. It goes around its star once every hundred days, a trifle fast, but not too different from a standard Earth-year. At least two and possibly three other planets circle the same star, forming a complete solar system.

Interested? Don't be. Going there would be the last thing you ever do.

The star is a pulsar, PSR 1257+12, the seething-hot core of a supernova that exploded millions of years ago. Its planets are bathed not in gentle, life-giving sunshine but instead a blistering torrent of X-rays and high-energy particles.

"It would be like trying to live next to Chernobyl," says Charles Beichman, a scientist at JPL and director of the Michelson Science Center at Caltech.

Our own Sun emits small amounts of pulsar-like X-rays and high energy particles, but the amount of such radiation coming from a pulsar is "orders of magnitude more," he says. Even for a planet orbiting as far out as the Earth, this radiation could blow away the planet's atmosphere, and even vaporize sand right off the planet's surface.

Astronomer Alex Wolszczan discovered planets around PSR 1257+12 in the 1990s using Puerto Rico's giant Arecibo radio telescope. At first, no one believed worlds could form around pulsars—it was too bizarre. Supernovas were supposed to destroy planets, not create them. Where did these worlds come from?

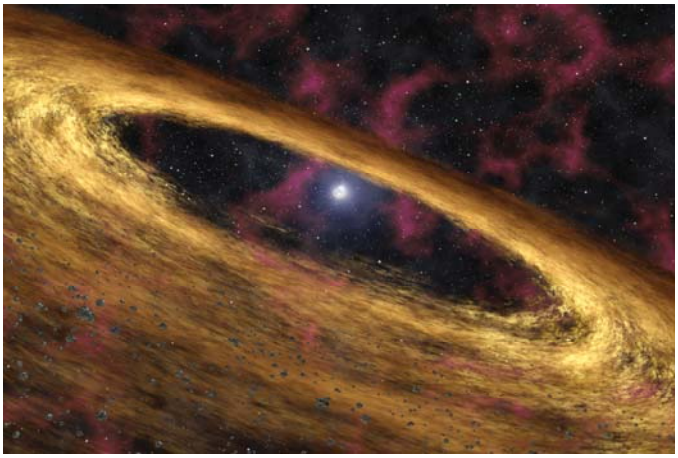
NASA's Spitzer Space Telescope may have found the solution. In 2005, a group of astronomers led by Deepto Chakrabarty of MIT pointed the infrared telescope toward pulsar 4U 0142+61. Data revealed a disk of gas and dust surrounding the central star, probably wreckage from the supernova. It was just the sort of disk that could coalesce to form planets!

As deadly as pulsar planets are, they might also be hauntingly beautiful. The vaporized matter rising from the planets' surfaces could be ionized by the incoming radiation, creating colorful auroras across the sky. And though the pulsar would only appear as a tiny dot in the sky (the pulsar itself is only 20-40 km across), it would be enshrouded in a hazy glow of light emitted by radiation particles as they curve in the pulsar's strong magnetic field.

Wasted beauty? Maybe. Beichman points out the positive: "It's an awful place to try and form planets, but if you can do it there, you can do it anywhere."

Find more news and images from Spitzer at http://www.spitzer.caltech.edu . In addition, The Space Place Web site features several games related to Spitzer and infrared astronomy, as well as a storybook about a girl who dreamed of finding another Earth. Go to http://tiny.cc/lucy208 .

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



Caption: *Artist's concept of a pulsar and surrounding disk of rubble called a "fallback" disk, out of which new planets could form.*

Set For Launch

X37B Launch -- April 19th

http://www.space.com/missionlaunches/air-force-space-plane-test-sfn-100403.html

Shuttle Discovery Landing in FL -- April 18th

http://www.nasa.gov/mission_pages/shuttle/main/index.html

Local News

Obama visits Kennedy Space Center for the U.S. Space Exploration Conference -- April 15th

http://www.bloomberg.com/apps/news?pid=20601124&sid=a7I_vkCKIg5w

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Answer to the trivia question:

Barnard's Star in the constellation of Ophiuchus has a proper motion of 10.3 arcseconds per year which equates to about half the angular diameter of the full Moon in a human life time.

Constellation:	Ophiuchus
Right ascension:	17h 57m 48.5s[1]
Declination:	+04° 41′ 36″[1]
Apparent magnitude:	(V) 9.54[1]

Credit*: http://en.wikipedia.org/wiki/Barnard's_Star*
http://en.wikipedia.org/wiki/File:Barnard2005.gif

2010 Membership Dues:

For the bargain price of only *$20.^{00} per family*, all this can be yours for the coming year!

- ✓ Meet with your fellow astronomy enthusiasts at least 10 times a year.
- ✓ Many opportunities to freeze/sweat/get bitten by mosquitoes in the Fakahatchee Strand.
- ✓ View planets, nebulae and many other celestial objects.
- ✓ Reduced price for Sky & Telescope and Astronomy subscriptions.

Don't miss out! Fill out this form (please print plainly) and send it with your $20 check, payable to:

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Name: _____
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