Monthly Notices of the Everglades Astronomical Society

Naples, FL
October 2010

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President's Message

We sure had a great turnout at our September meeting. As the winter folks arrive for their winter stay our meeting place will fill up. This is great news, your support of the club is outstanding. Hopefully our programs will be to your likening. Please let us know if anyone would like to make a live presentation. We try to not show too many DVD's.

The October program will be (Bring Your Telescope Night or Show and Tell) If you have general problems with your scope, such as, how to setup your scope, or how to align the optics, we can discuss those and many other issues. Some of the us will bring in our scope to let you see what we are doing with them. Plan to be at the meeting room a little early if you are bringing a scope.

See you at the meetings and Clear Skies,

Charlie Paul
Co President

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
Oct 7	7:07pm	7:08am	6:53pm
Oct 9	7:05pm	9:22am	8:24pm
Oct 30	6:47pm	12:35am	2:07pm

Next Meeting

Oct 12, 2010
Time 7:00 – 9 pm
At the Norris Center, 755 8th Avenue South, Naples, FL

Sky Events

Oct 7 -- New Moon
Oct 14 -- First Quarter Moon
Oct 22 -- Full Moon
Oct 30 – Last Quarter Moon

Meteor Shower:
Meteor Shower: Orionid
Radiant and direction: Orion (SE)
Morning of maximum: Oct. 21
Hourly rate: 10-15
Parent body: 1P/Halley

Visible Comet:
Comet Hartley 2 may be visible by end of Sept. through November with binoculars. Located near the constellation Cassiopeia in the NE sky. See the star chart at the end of the news letter.

Start Parties:

2010 CSPG Fall Star Party - $30 donation requested.
November 1-7, 2010 Chiefland Florida
2 Day Sky Imaging Workshop - $400
Latitude 29o 24' 29.52" N Longitude 82o 51' 38.52" W
http://www.fallstarparty.com

Astronomical Trivia Question of the Month

Which is older, a Population I, II, or III star?

a. Population I
b. Population II
c. Population III

Answer on next page.

The Hunt is On!
By Carolyn Brinkworth

The world of astronomy was given new direction on August 13, 2010, with the publication of the Astro2010 Decadal Survey. Astro2010 is the latest in a series of surveys produced every 10 years by the National Research Council (NRC) of the National Academy of Sciences. This council is a team of senior astronomers who recommend priorities for the most important topics and missions for the next decade.

Up near the top of their list this decade is the search for Earth-like planets around other stars—called "extrasolar planets" or "exoplanets" —which has become one of the hottest topics in astronomy.

The first planet to be found orbiting a star like our Sun was discovered in 1995. The planet, called "51 Peg b," is a "Hot Jupiter." It is about 160 times the mass of Earth and orbits so close to its parent star that its gaseous "surface" is seared by its blazing sun. With no solid surface, and temperatures of about 1000 degrees Celsius (1700 Fahrenheit), there was no chance of finding life on this distant world. Since that discovery, astronomers have been on the hunt for smaller and more Earth-like planets, and today we know of around 470 extrasolar planets, ranging from about 4 times to 8000 times the mass of Earth.

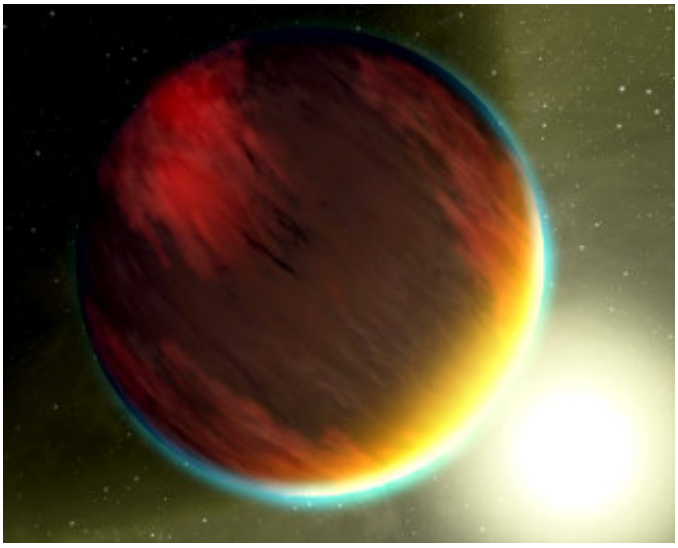
This explosion in extrasolar planet discoveries is only set to get bigger, with a NASA mission called Kepler that was launched last year. After staring at a single small patch of sky for 43 days, Kepler has detected the definite signatures of seven new exoplanets, plus 706 "planetary candidates" that are unconfirmed and in need of further investigation. Kepler is likely to revolutionize our understanding of Earth's place in the Universe.

We don't yet have the technology to search for life on exoplanets. However, the infrared Spitzer Space Telescope has detected molecules that are the basic building blocks of life in two exoplanet atmospheres. Most extrasolar planets appear unsuitable for supporting life, but at least two lie within the "habitable zone" of their stars, where conditions are theoretically right for life to gain a foothold.

We are still a long way from detecting life on other worlds, but in the last 20 years, the number of known planets in our Universe has gone from the 8 in our own Solar System to almost 500. It's clear to everyone, including the Astro2010 decadal survey team, that the hunt for exoplanets is only just beginning, and the search for life is finally underway in earnest.

Explore Spitzer's latest findings at http://www.spitzer.caltech.edu. Kids can dream about finding other Earths as they read "Lucy's Planet Hunt" at http://spaceplace.nasa.gov/en/kids/storybooks/#lucy.

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 rendering of hot gas planet HD209458b. Both the Hubble and Spitzer Space Telescopes have detected carbon dioxide, methane, and water vapor—in other words, the basic chemistry for life—in the atmosphere of this planet, although since it is a hot ball of gas, it would be unlikely to harbor life.*

Set For Launch

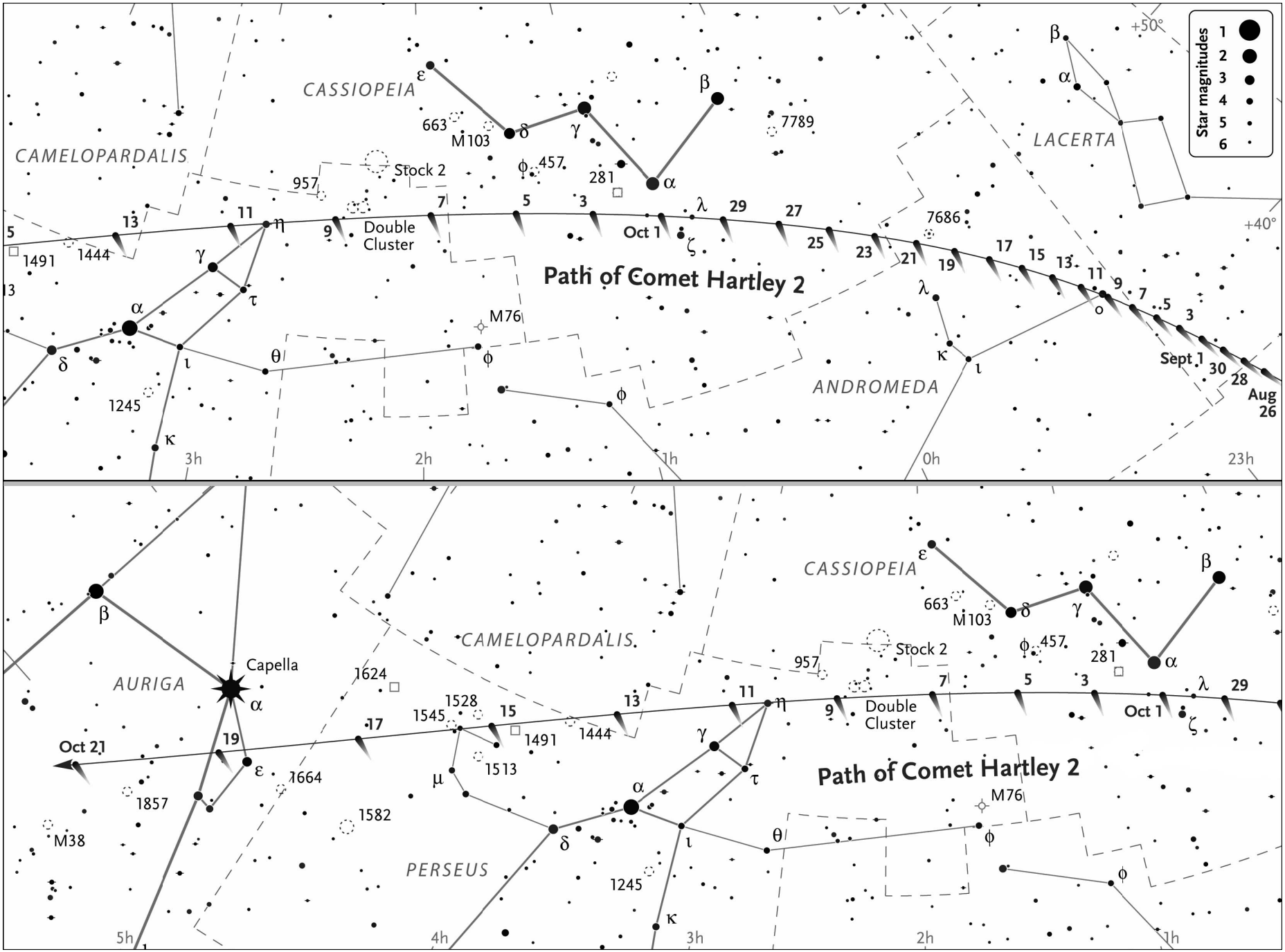
Mission: STS-133
Space Shuttle: Discovery
Launch Date: Targeted for Nov. 1, 2010
Launch Time: 4:40 p.m. EDT
Launch Pad: 39A
Landing Site: Kennedy Space Center, Fla.

Space Shuttle Endeavor will fly in February 2011 as the last Space Shuttle flight.

Answer to the trivia question:

Population III stars are the oldest, first generation stars that formed at the beginning of the universe. Our sun is a third generation star formed out of the debree of the remnants of two older generations of stars, so it is a Population I star. The next generation after our sun dies will be Population 0.

Credit*:*
http://en.wikipedia.org/wiki/Metallicity#Population_I_stars



Credit: http://media.skyandtelescope.com/images/CometHartley2-bw.jpg

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.

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

Everglades Astronomical Society
P.O. Box 1868
Marco Island, Florida 34146

Name: _____
Address: _____
Phone: _____
Email: _____