

Comet Tempel-1 from the Stardust Mission February 14, 2011

# **Longmont Astronomy Society Newsletter February 2011**

#### From the President:

# LAS Meeting - Thursday February 17th

The February meeting of the Longmont Astronomical Society is this Thursday, February 17<sup>th</sup>, at the IHop Restaurant, 2040 Ken Pratt Blvd., Longmont, CO. Please join us for dinner around 6 pm at the restaurant. The general meeting will begin at 7 pm.

The speaker will be Luke Dones, an astronomer at the Southwest Research Institute in Boulder. Dr. Dones received a bachelor's in physics from Harvard University and a Ph.D. in astronomy from the University of California at Berkeley. He is a member of the Cassini Imaging Science Team.

The Cassini/Huygens is a spacecraft that has been in orbit around Saturn since 2004, and is expected to operate until 2017. Dr. Dones will discuss discoveries that Cassini has made about Saturn's icy ring system, including changes in the rings; findings of new moons and ringlets within gaps; and current thinking about the age and origin of the rings.

Following Dr. Dones presentation there were will be business meeting with treasurer report, discussion of this years plans for MRS observatory site, and update on the Astronomical League Conference this summer at Bryce Canyon.

We received news last week that LAS member, Don Winner, has passed away.

#### In the sky this month:

Meteor Showers Not til April

## **Planets**

Mercury:

late March is the best time to look for Mercury in the evening sky in 2011. It's in the west at sunset, not far from Jupiter.

Venus:

Bright in the Southeast at dawn

Mars:

Jupiter:

Jupiter's South Equatorial Belt has reappeared for small telescopes, as seen at right, after more than a year of being hidden by overlying white ammonia clouds. Jupiter shines brightly in the west-southwest at the end of twilight.

Saturn:

Improving, and at its best in early April

### **Interesting Stars/Galaxies**

Sun fires a plasma bullet last week – you can watch the video at <a href="http://spaceweather.com/swpod2011/12feb11/plasmabullet\_color.mov?">http://spaceweather.com/swpod2011/12feb11/plasmabullet\_color.mov?</a> <a href="http://spaceweather.com/swpod2011/12feb11/plasmabullet\_color.mov?">PHPSESSID=7tmdb2mn75e90fbdpg8pgafh50</a>

Sunspot 1158 is growing rapidly and blasting off material. You can watch Sunday's movie at <a href="http://spaceweather.com/images2011/13feb11/ar1158\_anim.gif?">http://spaceweather.com/images2011/13feb11/ar1158\_anim.gif?</a> <a href="http://spaceweather.com/images2011/13feb11/ar1158\_anim.gif?">PHPSESSID=813153kk0va9oj02evfr3ride2</a> and that material is landing on Earth right about now, so go out and look for aurora....

#### **Club Calendar:**

# **Upcoming Star Parties and Events**

Legacy Elementary on Tuesday February 15<sup>th</sup>
Beginning Astronomy class on Friday February 25<sup>th</sup>
Erie High School MESA on Thursday March 10<sup>th</sup>
Beginning Astronomy class star party Friday March 11<sup>th</sup>

Next meeting: March 17th, 7:00 at the IHOP

Fiske Planetarium: Admission costs \$3.50 for kids and seniors and \$6 for adults

• Supernovae: The Death of Stars with Dr. Dick McCray (February 17, 2011, 7:30 pm)

http://events.colorado.edu/EventList.aspx? view=EventDetails&eventidn=5304&information\_id=21646&type=&syndicate=s vndicate

A supernova is a colossal explosion marking the death of a massive star; supernovae have been observed since the dawn of history. Dr. Dick McCray describes what we have learned about supernovae from a...

+ Supernovae: The Death of Stars with Dr. Dick McCray (February 18, 2011, 7:30 pm)

http://events.colorado.edu/EventList.aspx?

<u>view=EventDetails&eventidn=5305&information\_id=21648&type=&syndicate=syndicate</u>

A supernova is a colossal explosion marking the death of a massive star; supernovae have been observed since the dawn of history. Dr. Dick McCray describes what we have learned about supernovae from...

+ Charlas de las Estrellas con Tito Salas (February 22, 2011, 7:30 pm) <a href="http://events.colorado.edu/EventList.aspx?">http://events.colorado.edu/EventList.aspx?</a> <a href="mailto:view=EventDetails&eventidn=5320&information\_id=21683&type=&syndicate=syndicate">view=EventDetails&eventidn=5320&information\_id=21683&type=&syndicate=syndicate</a>

Astronomia de Nuestros Antepasados Agujeros negros, explosiones de estrellas y

formacion<span style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;"> ¿Que relacion t...

+ Colorado Skies: Life After the Space Shuttle (February 24, 2011, 7:30 pm) <a href="http://events.colorado.edu/EventList.aspx?">http://events.colorado.edu/EventList.aspx?</a>

<u>view=EventDetails&eventidn=5330&information\_id=21704&type=&syndicate=syndicate</u>

Come join us as Matt Benjamin talks about what will happen once the Space Shuttle is retired.

#### **Internet Resources:**

## R. Jay GaBany Wins Chambliss Award

Last week the American Astronomical Society (AAS) announced that R. Jay GaBany, a product manager for internet-based companies from San Jose, California, is the 2011 winner of the Society's Chambliss Amateur Achievement Award. The award is given annually to an amateur astronomer from North America who makes outstanding contributions to scientific research.

His series of astrophotos are truly astounding, and his website is pretty durn good, too. Don't open this in hearing of young kids, because the first words out of your mouth aren't fit for their ears.... At <a href="http://www.cosmotography.com/">http://www.cosmotography.com/</a> Promptly honored him by selecting one of his images as my desktop background – high praise, indeed!

# "Hidden Treasures" Winners Announced

There's nothing particularly exotic about photographing an astronomical object through red, green, and blue filters — thousands of the world's amateur astronomers do that every night. But when the images are taken by a 64-megapixel CCD attached to a 2.2-m telescope high in the Chilean Andes, well, that's another story altogether.

It was only a <u>few months ago</u> that officials at the European Southern Observatory launched the "Hidden Treasures" project. They made available a huge cache of archived images just to see what creative astrophotographers could come up with. As an incentive, the contest included an all-expenses-paid trip to the ESO's Very Large Telescope for its first-place winner.

http://www.skyandtelescope.com/community/skyblog/newsblog/114501019.html will show you the two best photos, and http://www.eso.org/public/images/archive/top100/will show the top 100. So many images, so little time....

Nice article in the NY Times on January 31 about the Kepler telescope at <a href="http://www.nytimes.com/2011/01/31/science/space/31planet.html?scp=1&sq=kepler@20telescope&st=cse">http://www.nytimes.com/2011/01/31/science/space/31planet.html?scp=1&sq=kepler@20telescope&st=cse</a> and an attached article about the methods and a chart of the planets discovered to date at

http://www.nytimes.com/interactive/2011/01/31/science/space/planet.html?ref=space and http://www.nytimes.com/2011/01/31/science/space/31star.html?ref=space Over 500 planets and counting!

Kepler announced on February 2 that it had discovered about 1000 new planets – further evaluation will probably discard about 10% of those. Remember when we were warned that the big news was coming next February?

<u>http://www.nasa.gov/mission\_pages/kepler/main/index.html</u> for the main website, but it's kinda clunky to navigate around on, not NASA quality at all. Try other sites for better data interpretation.

NASA Science News for Feb. 6, 2011

On Super Sun-day, NASA's STEREO spacecraft moved into position to photograph the entire sun--front and back. Researchers say this is a transforming moment in solar physics that could lead to big advances in space weather forecasting.

http://science.nasa.gov/science-news/science-at-nasa/2011/06feb\_fullsun/

Winter video: How about a video of an Ice Volcano on Titan to make you feel warm? <a href="http://www.jpl.nasa.gov/video/index.cfm?id=951">http://www.jpl.nasa.gov/video/index.cfm?id=951</a> for the action.

Stardust is closing in on Tempel 1 for a Valentines Day look. The last pictures came one orbit back, so the changes in surface features should be informative. If I don't have anything more, you're going to have to go look yourself at <a href="http://stardustnext.jpl.nasa.gov/">http://stardustnext.jpl.nasa.gov/</a>

#### **Current Space Missions:**

http://science.nasa.gov/science-news/science-at-nasa/2011/26jan fizzyocean/

A Fizzy Ocean on Enceladus January 26, 2011: For years researchers have been debating whether Enceladus, a tiny moon floating just outside Saturn's rings, is home to a vast underground ocean. Is it wet--or not? Now, new evidence is tipping the scales. Not only does Enceladus likely have an ocean, that ocean is probably fizzy like a soft drink and could be friendly to microbial life.

The story begins in 2005 when NASA's Cassini probe flew past Enceladus for a close encounter.

## **Humor Dept:**

Geez, a cartoon, yet...

