

# Galactic Gazette

A Newsletter of the Kiski Astronomers



Member of the Astronomical League

## CORNER OF THE UNIVERSE

OUR



Observations by Kiski Astronomers and friends

### Double Vision!

By Denny Hill Excerpts from BBC News

Have you been seeing double lately? Dr. John Hill and his fellow astronomers might say they have been with the completion of the Large Binocular Telescope (LBT) close at hand.

Dr. Hill is the technical director of the LBT. He's also been a member of the Kiski Astronomers since the beginning of the 70's, while still in high school. He and the LBT have been in the spotlight the past several months with articles and interviews in *Astronomy Magazine* and *BBC News* to spots on "How It's Made" on the Science Channel and "Really Big Things" on the Discovery Channel to name a few.

Located at the Emerald Peak site on Mt. Graham, the LBT saw "First Light" on Oct. 12, 2005 using it's first installed mirror.

If you are not familiar with the LBT, it uses two 8.408 meter - F/1.142 primary mirrors to provide a collecting area equivalent to an 11.8 meter circular aperture. By having both



the primary mirrors on the same mounting, the telescope will be able to achieve the diffraction-limited image sharpness of a 22.8 meter aperture.

The light from both mirrors cannot be combined yet but it's

flexible design still allows useful science to be done using each mirror individually, doing projects for everything from looking for asteroids to doing photometry of stars in nearby galaxies according to John. A wide-field ultraviolet and blue spectrum camera, known as the Large

(cont. on page 2)

## December Meeting and Banquet Update

With the holiday season upon us, the Kiski Astronomers will be taking a break from their regular club meeting this month. With our regular meeting date just two days before the Christmas Banquet, the members voted not to hold a December meeting.



Elections for president / vice president will be held at the banquet before the festivities begin. Ballots will be provided for all to cast their vote. May the best man win!!!

Our next regularly scheduled meeting will be on January 3rd, 2008 to ring in the New Year and another great year for the Kiski Astronomers!

## Holiday Banquet



### Attention Kiski Astronomers!

In case you forgot, our Christmas Banquet is this Saturday, December 8th, at the Garden Gate Restaurant. The restaurant is located along Rt. 422, west of Butler. We will be partying in one of their banquet rooms from 4 pm to 8 pm. Dinner will be buffet style and it's all you can eat! The meal will run \$11 per person.



You can also BYOB if you need something to help you get into a festive mood!

Again we will be drawing for door prizes so start cleaning out your observatory and closets for items that you would like to donate!

See you there!

Happy

Holidays!



## Double Vision

(cont. from page 1)

Binocular Camera (LBC) makes this work possible right now.

But LBT won't be close to its full potential until both mirrors see the light ... "second light" that is, taking images simultaneously when the other LBC (able to take images in the infrared) is installed above the second primary mirror.



Fernando Pedichini, Roberto Speziali, Andrea DiPaola, John Hill, Dave Thompson (background) in LBT Control Room: Photo by Ray Bertram

To get optimal performance of this scope, we will have to wait until the secondary mirrors with the adaptive



optics are installed later in 2008. Then, in 2009, the instruments that will take advantage of the AO system will be up and running, one of those being the LBT interferometer

(LBTI). "It's designed as what's called a nulling interferometer that lets you reverse the phase of the light when it's combined so you cancel the light from a bright star and look for a faint planet next to a star," explained Dr Hill. "In turn, this should allow astronomers an unprecedented ability to image extrasolar planets."

Once the LBT is fully operational, it will have up to 10 times the resolution of the Hubble Telescope and usher a new era of ground based observing and science!



"The exciting thing about building a big telescope is that you never know what kind of discovery you will make" says Dr. Hill "It will probably discover things that people haven't even thought of yet."

## Comets Present and Future

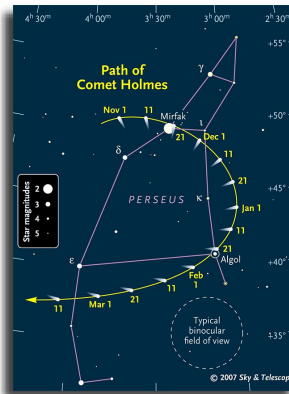
The brightest comet of the season is still "floating" in the heavens above. This strange and unusual looking snowball has put on quite a show the past couple months since brightening from a magnitude of 17 to startling 2½ within a few days! With the local weather being uncooperative and the full moon adding insult to injury when we've had a clear night, it's been a while since we've had a



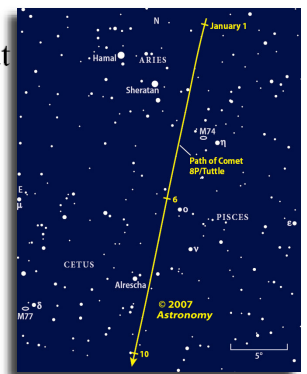
Oct. 28, 2007  
Photo by Denny Hill

decent night to view it. But Comet Holmes still have some life in it, even though it's lost some surface brightness as it's disc expands.

This isn't the first time this comet has erupted. The comet was in a major eruption 115 years ago, in November 1892, allowing English amateur Edwin Holmes to find it. It reached 4th or 5th magnitude, faded in the following weeks, and then brightened 2½ months later. Keep up with Comet Holmes' journey while you can.



As one comet fades, another is on its way to take its place. Comet 8P/Tuttle will be at its best between the last week of December through January 10, hopefully reaching around magnitude 6 or better. After that the moon becomes the spoiler 'til the comet fades and moves to the southern hemisphere. Keep your fingers crossed for clear skies on December 30 when Comet Tuttle passes next to M33 in Triangulum! Also, don't forget that the Ursid Meteor Shower (the offspring of Comet Tuttle) is on December 22/23 although the full moon will pretty much wash it out this year.



## Quote:

**"I do not feel obliged to believe that the same God who has endowed us with sense, reason, and intellect has intended us to forgo their use."**  
Galileo Galilei

# Galactic Humor!

## Politically-Correct Astronomical Names

Submitted by Gary Shannon

Here's a list of politically correct terms for deep space objects, since all or most were named by racially and culturally uninitiated white males:

- 1.. *Dwarf star*: radially challenged star
- 2.. *Big Bang*: Large Explosion
- 3.. *Variable Periods*: variable magnitude time frame.
- 4.. *Dark Matter*: Light Deprived Matter
- 5.. *Eskimo Nebula*: High Northern Latitude Indigenous Peoples Nebula
- 6.. *Orion the Hunter*: Orion the White Male Chauvinist Meat-Eating Pillager of the Environment
- 7.. *Hercules and the Hercules cluster*: Personcules
- 8.. *Crab Nebula*: The Endangered Body Louse Nebula
- 9.. *Northern Cross*: Northern Sectarian Symbol Constellation
- 10.. *Scutum*: I don't know. But this sounds like a body part. (ie "I'm sorry Mrs. Jones, you have an inflamed scutum.")
- 11.. *White dwarf*: Pigmentally deprived radially challenged star
- 12.. *Black Hole*: A hole of color.
- 13.. *Andromeda*: The woman oppressed by a white male oligarchy.
- 14.. *Ursa Major & Ursa Minor*: Endangered long tailed bears.
- 15.. *Wormhole*: segmented vertebrate-challenged hole
- 16.. *Infrared*: Frequency challenged invisible light radio emissions.
- 17.. *Minor Planet*: mass-challenged solar system object

## Texas Star Party 2008

Howdy all! It's that time of year to mark your calendar for next June. Yes, the Texas Star Party is set for June 2 - 8 at the Prude Ranch, near Fort Davis, Texas. So now is the time to make your plans if you are going to attend.

Every year Bob Kepple coordinates the reservation of a bunkhouse for himself and club members planning on attending. He has put the word out and is asking that everyone planning on attending contact him ASAP so he can add you to the list. It's imperative you do contact him in a timely manner for the bunkhouses fill up fast! You can email him at [astrocards@aol.com](mailto:astrocards@aol.com).

## Celestial Eye Candy

### Early Christmas Present

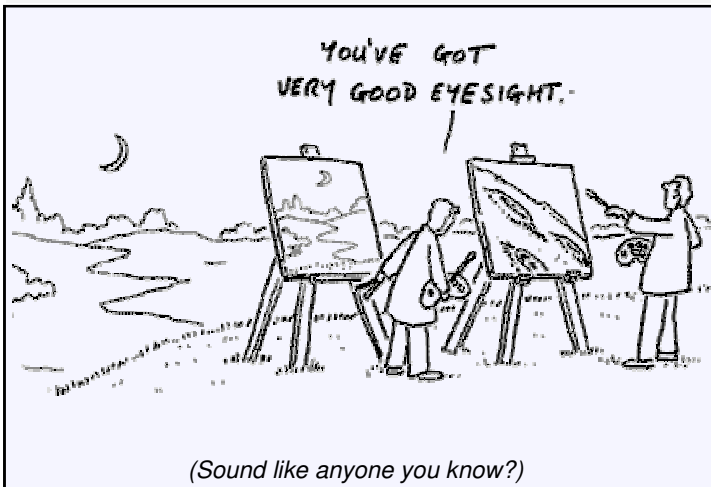
Keep an eye or 2 out late Thursday night, December 13th into Friday, December 14th, 2007 for the peak of the Geminid Meteor Shower!

This is not an ordinary meteor shower though. While most meteor showers come from comets, the Geminids come from an asteroid, a near-Earth object named 3200 Phaethon. Also, it's now catalogued as a "PHA" - a potentially hazardous asteroid whose path misses Earth's orbit by only 2 million miles. It measures 5 km wide and this year it will be flying past Earth just a few days before this year's shower. On Dec. 10th, Phaethon will be about 11 million miles away shining at 14th magnitude in the constellation Virgo. There are a couple theories on why Phaethon produces a debris field in it's orbit. Check out [http://science.nasa.gov/headlines/y2007/03dec\\_asteroidshower.htm?List99309](http://science.nasa.gov/headlines/y2007/03dec_asteroidshower.htm?List99309) for more information.

### Last Total Eclipse of the Moon

It's a couple months away yet but post your reminder now for February 20th ... the **Last Total Lunar Eclipse!** Yes, I said last ... last for this decade anyway! The umbral shadow starts at 8:43pm with totality at 10:01pm and will last 50 minutes.

If you miss this total eclipse, you will have to wait until December 20/21 of 2010 for the next one.



The

## Galactic Gazette

is published & edited by

**Denny Hill**

Contributions to the newsletter are greatly appreciated! Please consider sharing your knowledge and experiences along with any expertise with me for future issues!

*This is your newsletter! Make it the best it can be!*

Email your articles to me at [dhill955@alltel.net](mailto:dhill955@alltel.net)

Thanks!



## Kiski Astronomers Information Center

**President:** Ed Kuzemchak  
Ed@Kuzemchak.com 412-952-5347  
**V. President:** John Labrecque  
strwvr@zoominternet.net 724-272-4548  
**Secretary:** Denny Hill  
dhill955@alltel.net 724-845-7567  
**Treasurer:** JoAnne Trees  
TreesT@Comcast.net 724-337-3231

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JoAnne Trees  
374 Vernon St.  
New Kensington, PA 15068

### Website

<http://groups.yahoo.com/group/kiskiastronomers/>

**Club Email List server:** Open forum messages.  
[kiskiastronomers@yahoogroups.com](mailto:kiskiastronomers@yahoogroups.com)

## Nocturnal Notables December 2007



December 9, ☉ New Moon 12:40 P.M.  
December 12, Vesta 0.4° north of Moon, occultation  
December 13, Geminid meteor shower  
December 14, Neptune 0.7° north of Moon, occultation  
December 15, Pallas 1.0° south of Moon, occultation  
December 13, Geminid meteors  
December 15, Pallas 1.0° south of Moon, occultation  
December 16, Uranus 2° south of Moon  
December 17, ☾ First Quarter Moon 5:18 A.M.  
December 17, Mercury in superior conjunction  
December 18, Mars closest approach  
December 20, Saturn stationary  
December 20, Pluto in conjunction with Sun  
December 22, Winter solstice 1:08 A.M.  
December 22, Moon at perigee  
December 23, ☀ Full Moon 8:16 P.M.  
December 23, Jupiter in conjunction with Sun  
December 23, Mars 0.9° south of Moon, occultation  
December 24, Mars at opposition  
December 27, Regulus 0.6° north of Moon, occultation  
December 28, Saturn 3° north of Moon  
December 31, ☾ Last Quarter Moon 2:51 A.M.  
January 1, Ceres stationary  
January 2, Earth at perihelion  
January 3, Moon at apogee  
January 3, Quadrantid meteor shower  
January 5, Venus 7° north of Moon  
January 5, Antares 0.5° north of Moon, occultation

## November 1<sup>st</sup>, 2007 Meeting Minutes

The Kiski Astronomers met at 7pm at Kiski High School in the LGI room.

The program for the evening was a video presented by Lou Vergari

The business was called to order at 8:27pm by acting president Denny Hill.

Reading of the minutes was waived because they were posted in November's newsletter.

**Treasurers report:** Opening / closing balance \$831.37

**Old Business:** Hidden Hollow Star Party in Ohio was recapped. Denny Hill, Bob Kalan & Bob Novak attended.

The Christmas Banquet is scheduled for December 8, 2007 from 4pm to 8pm at the Garden Gate Restaurant in Butler. Everyone is asked to bring a small gift for door prizes.

Dave Koren gave an update on the outdoor lighting situation with the new home construction in his area. The contractor disregarded the lighting covenant. Dave talked to the local supervisors. Builder changed them all out to compliant lighting.

**Observations:** Comet Holmes was observed by just about everyone. Terry and JoAnne Trees saw Venus naked eye during daytime. Dave Koren saw an earthgrazer

**New equipment:** Gary Shannon bought 2 - 9mm eyepieces for his binoviewer.

**New business:** Nominations for officers were held .

**President / vice president:** John Labrecque, Gary Shannon, Dave Koren, Terry Trees

**Secretary:** Dennis Hill

**Treasurer:** Ed Kuzemchak

Denny asked if there would be interest in looking into getting new tee shirts with silkscreened logos. The response was favorable.

There was a discussion about having December's meeting being it would be 2 days before the banquet. Members voted not to hold the December meeting.

Denny Hill asked for input for setting up a program for talking to school students. One suggestion was to talk to Bob Novak. A couple members pointed out that I might have a problem because of Act 38.

Meeting was adjourned at 9:24 pm.