

Pizza Gram

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From: Starlord (starlord_at_despammed.com)

Date: 06/18/04

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From: "MacYoda"

Beyond Earth Pizza Delivery!

Greetings Fellow Stargazer,

Is Earth the only place that delivers Pizza? I don't think so! If you

haven't seen the DVD movie "Contact"

<http://contact-themovie.warnerbros.com/main.html>

yet, you should watch it with your entire family to see it right now!

There's no doubt that "Contact" is indescribably more accurate in its depiction of SETI than any Hollywood film in history!

Yes that is SETI and it is not a type of SPAGHETTI! Then what is SETI (<http://www.seti-inst.edu/>) you ask? Well...the SETI Institute serves as

a home for scientific research in the general field of Life in the Universe with an emphasis on the Search for Extraterrestrial Intelligence

(SETI). Their research is designed to answer the question: Are we alone

in the Universe and if not, do they deliver?

Help find E.T. by downloading the Seti Screensaver at:

<http://setiathome.ssl.berkeley.edu/>

If you want to join my group who have logged just under 100,000 hours then enter this when it asks you to return and log in:

macyoda@aol.com

(do this after you download the program and start it up)

Well... if you bring a Pizza to this month's Star Party, I will be able

to confirm that one is not alone when eating pizza at a Star Party!

Sooo... join us for the June 19th Star Party at Dillingham Air Field and bring an "Out of this World" Pizza with you!!!

Star Party Invite for June 19th
Sponsored by the Hawaiian Astronomical Society
<http://www.hawastsoc.org>

Dillingham Airfield – before sunset (7:15 pm)
(Star Party Directions are at the end of this message)

Bring:
<http://bishopmuseum.org/planetarium/skyWatch/2004/06/june04.pdf>

Here is where I go to check the weather on a Star Party Night:

<http://www.wunderground.com/radar/radblast.asp?num=6&delay=15&scale=1&noclutter=0&ID=HMO&type=N0R&lat=0&lon=0&label=you>

If it is clear, you will be able to see many astronomical sights.
It's now that time of year to see the Southern Cross, Omega Centauri, Jupiter, Vega, the Summer Triangle, as well as many other heavenly sights!

If you won't be in Hawaii, fear not. Check this link for a Star Party near you!

<http://SkyandTelescope.com/resources/organizations/>

If you miss this month's HAS Star Party then join us at the next:

- ***** 2004 *****
- July 10th
- August 7th
- September 18th
- October 16th
- November 6th
- December 4th

The movie "Contact"

"Contact" focuses around a star call Vega that you can see at this month's star party, and I will through in the Ring Nebula as well. And if you stay long enough you can even see Saturn!

In the movie "Contact", a radio message comes to Earth from the distant star Vega, and the Radio Astronomer, Ellie receives it. As the countries of the world unite in an effort to decode the transmission, the planet faces the message with equal parts hope and fear, for contained within it are blueprints for a machine of intergalactic travel capable of transporting its passenger to deep space. It could mean the dawning of an

astounding new era — or certain Armageddon.

As the world wrestles with the questions raised by the message, and humanity warily approaches the brink of a new millennium, Ellie vies to be selected as the single representative who will leave the Earth to explore the galaxies, seeking the unknown extraterrestrial source — and becoming the first person to make contact.

But her personal voyage will take her beyond theory, beyond knowledge, beyond experience, to the realization that true vision is ultimately the union of fact and faith.

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THE Drake Equation

The Milky Way galaxy contains over 400 billion stars (and is only one of billions of other galaxies). Could it be that ours is the only planet where life arose? Perhaps. Or maybe life is common, but too often destroys itself as technology becomes too powerful to handle. But we should also consider that the sheer vastness of space and the great number of stars and planets has given rise to a number of technological civilizations capable of communication.

The Drake Equation (<http://www.seti.org/drake-eq.html>) gives a means for estimating how many communicating civilizations may be out there. The results can vary widely, depending on the optimism of the numbers you yourself plug in.

The equation computes N: the potential number of communicative intelligent civilizations in our galaxy. It is computed using the following equation...

$$N = R^* \times f_s \times f_p \times n_e \times f_l \times f_i \times f_c \times L$$

...using the following factors:

- R* is the rate of formation of stars in the galaxy
- f_s is the fraction of stars that are suitable suns for planetary systems
- f_p is the fraction of those stars with planets (thought to be around 1/2)
- n_e is the number of "earths" per planetary system — planets suitable for liquid water
- f_l is the fraction of those planets where life develops
- f_i is the fraction of planets with life where intelligence develops
- f_c is the fraction of those planets that achieve technology which

releases detectable signals into space L is the lifetime of such communicative civilizations

Depending on the numbers used, the Drake equation can yield wildly differing results. Possibilities range from a few (relatively) short-lived technological civilizations scattered far apart among the stars, never contacting each other before they disappear, to a more probable (considering the vastness of the cosmos) large number of life-bearing planets. There are over 400 billion stars in our galaxy alone, and it is estimated that approximately 1/2 of all suitable suns have planetary systems of some sort.

It is not known how likely it is for life to develop on a suitable planet. Once life does exist, however, it is quite evident from our own evolutionary history that it is quite adaptable and tenacious. The jury is still out, however, on how long species survive once they have developed intelligence and powerful technology.

Project Phoenix

(http://www.seti.org/ao_02_04/background.php)

Project Phoenix is the world's most sensitive and comprehensive search for extraterrestrial intelligence. It is an effort to uncover extraterrestrial civilizations by listening for radio signals that are either being deliberately beamed our way, or are inadvertently transmitted from another planet. Phoenix is the successor to the ambitious NASA SETI program that was cancelled by a budget-conscious Congress in 1993.

Phoenix began observations in February, 1995 using the Parkes 210 foot radio telescope in New South Wales, Australia. This is the largest radio telescope in the Southern Hemisphere.

Phoenix doesn't scan the whole sky. Rather, it scrutinizes the vicinities of nearby, sun-like stars. Such stars are most likely to sport long-lived planets capable of hosting life. There are about one thousand stars targeted for observation by Project Phoenix. All are within 200 light-years distance.

Because millions of radio channels are simultaneously monitored by Phoenix, most of the "listening" is done by computers. Nonetheless, astronomers are required to make critical decisions about signals that

look intriguing.

Phoenix looks for signals between 1,000 and 3,000 MHz. Signals that are at only one spot on the radio dial (narrow-band signals) are the "signature" of an intelligent transmission. The spectrum searched by Phoenix is broken into very narrow 1 Hz-wide channels, so two billion channels are examined for each target star. Observations are currently being made using the 140 foot radio telescope in Green Bank, West Virginia.

By mid-1996, Phoenix had examined approximately one-third of the stars on its "hit list." So far, no clearly extraterrestrial transmissions have been found. But the faint whine that would betray an alien civilization might be heard tomorrow.

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The Arecibo Message

The Arecibo Message, sent on November 16, 1974 from the Arecibo Observatory in Puerto Rico, consisted of 1,679 bits of information, which is divisible by two prime numbers -- 73 and 23 -- which suggest laying out the message in those dimensions, revealing this image.

The picture sent shows our chemical makeup, our population, our height, our planetary system, and the telescope transmitting the message.

The message was aimed at the M13, the Hercules Globular Cluster; it will reach its destination in about 25,000 years. Check back 25,000 years after that with me and I will let you know what kind of pizza they have!

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The Wanderers (The Planets) this Month

Mercury is hidden in the glare of the Sun.

Venus is buried deep in the glow of dawn, having passed inferior conjunction during its transit across the Sun's face on June 8th.

Mars (magnitude +1.8, in central Gemini) is disappearing into the glow of sunset low in the west-northwest. As twilight fades, look for it to

the
left
or lower left of similarly-bright Pollux and Castor. Binoculars will help.

Jupiter (magnitude -2.0 , between the feet of Leo) shines in the west-southwest during evening – the brightest point of light in the sky.

Look for fainter Regulus roughly a fist-width at arm's length to its lower right.

Saturn (magnitude $+0.1$) is very low in the west-northwest in twilight – about a fist-width to the lower right of Mars. Look early after sunset with binoculars!

Uranus and Neptune (magnitudes 6 and 8, respectively, in Aquarius and Capricornus) are well up in the southeast before the first light of dawn.

Pluto (magnitude 14, in Serpens Cauda) is well up in the southeast after dark.

Annual Meteor Showers

Quadrantids: January
Virginids: March/April
Lyrids: April
Scorpiids: May
Delta Aquarids: July
Perseids August
Piscids: September
Orionids: October
Leonids: November
Geminids: December

Find what is moving overhead after sunset:

<http://www.bester.com/>
<http://liftoff.msfc.nasa.gov/RealTime/JTrack/3d/JTrack3d.html>

Check out when the next Iridium Satellite is available for you to see:

<http://www.heavens-above.com/Neighbours.asp?PlaceID=593409>
(for non Oahu Star Gazers...)
<http://www.heavens-above.com/selecttown.asp?CountryID=US>

Check out:

<http://www.seds.org/messier/xtra/12months/m-jun-i.html>

and bring the above list...

As for the rest of the Messiers, check out

<http://www.hawastsoc.org/deepsky/messier.html> It also has a link to:

<http://www.hawastsoc.org/messier/index.html>

(all the Messier Objects as photographed by HAS's local Jay Wrathall)

Star Party Directions

(<http://www.hawastsoc.org/directions/dillingham.html>)

To reach the Dillingham observing site, take the H2 to the end at Schofield Barracks. Drive past Schofield and follow the signs to Waialua. At the Y intersection at Waialua, bear left and pass under the bridge. Drive out of town a few miles until you reach Dillingham Airfield. Dillingham is several miles long. It has three gates. You need to drive to the far end to the third gate (marked as Gate 1 on the color map). When you enter the gate, the road will curve left behind some hangars. It will then take you through a very sharp S curve. 1/4 mile beyond that is a stop sign in the middle of nowhere. Turn right at the stop sign, and you will be there. You can find me by looking for the big red telescope in the corner with a table with lots of pizza on it.

You will need to reach the site before sunset in order to find the gate open!!!

A few words on light. We try to maintain dark conditions at the site. Therefore we have certain rules about light. First, no white flashlights. The only flashlights that you should use are not too bright, red ones.

When entering and exiting the site, do not use headlights. Some cars now can't turn off their headlights. If you have a car like that please park nearer the windsock than the telescopes. Point it away from the telescopes. Headlights make you lose your night vision for up to 30 minutes. It immediately ruins any astro photography that might be in progress.

Bring some warm clothes, something to sit on, some real powerful bug spray, a dim or red covered flashlight and some munches to share with your friends.

Remember there is an absolute need to remain clear of the runway, and anyone attending the star party needs to remain in the immediate star party area. Do not be wandering around in areas where we are not

permitted. Especially near any planes (parked or moving)!

Bishop Museum Planetarium Happenings

Daily Planetarium schedule:

(808) 848-4136 for pre-recorded sky information and planetarium schedule.

11:30 a.m. Ÿ Explorers of the International Space Station (45 Minutes)

12:20 p.m. Ÿ Explorers of Polynesia (in Japanese , 30 Minutes)

1:00 p.m. Ÿ The Planet Show (in English , 45 Minutes)

3:30 p.m. Ÿ Explorers of Polynesia (45 Ÿ Minutes)

„The Sky Tonight,¾ an hour-long sky talk with Sam Rhoads, occurs on the first Monday, at 7:00 PM. Reservations are necessary, since Sam¼s shows often fill. \$4 for adults, \$3 for kids, free to Bishop Museum members and Hawaiian Astronomical Society members. Reservations for „The Sky Tonight¾: 848-4168.

After Dark with Stars in the Park

Waialeale Community Park

OR... Kahala Park

(Weather permitting)

***** 2004 *****

Jun 26th

July 24th

August 21st

September 25th

October 23rd

November 20th

December 18th

FROM DUSK to 9:30 PM

Bring your children! Tell your friends!

Visit the cosmos via:

The HAS HomePage: <http://www.hawastsoc.org/> or go to
(or show up at meeting 7:30pm first Tue of month)

and check out the Bishop Museum Planetarium Home Page

<http://www.bishopmuseum.org/planetarium/>

and the Institute for Astronomy Colloquia/Seminars

<http://www.ifa.hawaii.edu/>

http://apollo-society.org/launchpad39_A.html

Keep Looking Sky Ward...Gary Ward

<http://homepage.mac.com/macyoda/PhotoAlbum6.html>

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"The computer is to the mind as the amplifier is to sound."

Paul Maurer

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The mighty oak tree was once a little nut that held its ground!
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Dragons Must Fly when Thread's in the Sky
www.starlords.org

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (<http://www.grisoft.com>).
Version: 6.0.706 / Virus Database: 462 - Release Date: 6/14/04