

#### Podcasting & Astronomy Editor

"What"casting? Podcasting. By now you've likely heard of the Apple *iPod*, which has become the most popular of the hard disk based portable music players (if you want to see some examples, ask resident tecno-weenies Gary Ward or Paul Lawler). What you may not know is that the iPod is useful for much more than music. I like to think of podcasting as "radio to go."

In the 1940's there were several "homemaker" radio broadcasts, similar to the cable Food Channel, which originated from the homemakers' own kitchens. Podcasting revives that tradition and expands on it, by allowing almost anyone to create their own broadcast. Traditional radio broadcasting relies on FCC licensed frequencies (Continued on page 6)

# **Upcoming Star Parties**

Club Party	
Public Party	
Public Party	
Public Party	
Club Party	
Public Party	

Apr 2	Dillingham
Apr 9	Dillingham
Apr 16*	Kahala/Waikele
Apr 30	Dillingham
May 7	Dillingham
May 14	Kahala/Waikele

# Inside this issue:

Club Information	2
Observer's Notebook	3
Meeting Minutes	4
Meteor Log	5
Special Notice	5
School Star Parties	7
Treasurer's Report	7



### Upcoming Events:

- The next meeting is at 7:30 p.m. on Tuesday, April 5<sup>th</sup> at the Bishop Museum.
- Barry Peckham's next planetarium show is on Friday, April 1<sup>st</sup>.

\* Astronomy Day

# President's Message

Since our last meeting, the world has lost a giant of astrophysics. Hans Bethe died in early March at the age of 98. For the last few years, since I became aware of his work, I had enjoyed telling young students that the man who figured out how elements were created in stars was still alive.

Like many others, Bethe fled Nazi Germany, came to the U.S., and worked to help develop the atomic bomb during World War II. By that time, he had already come up with his idea of the "carbon cycle" that explained how carbon acts as a catalyst for hydrogen fusion in stars. He made many contributions to the explosion of knowledge that led, in a few short years, from almost total ignorance to a rather thorough understanding of the processes that occur in stars as hydrogen is transformed, in stages, to produce almost all of the other elements that exist.

Bethe's work is just one example of the rapidity with which humans are gaining a better understanding of the universe in which we live. Of course, we still have a long way to go, and we will probably never run out of questions about nature and how it works. However, it's good to look back every once in a while to see how far we've come, and how much can be accomplished in a single lifetime (and sometimes by a single person!).

I am currently attending the 36th Lunar and Planetary Science Conference in Houston, Texas where I have seen many interesting presentations. For example, on Titan, evidence that liquid methane exists underground and has flowed to carve channels has been reported, but as yet no surface pools of liquid methane have been found.

(Continued on page 5)

Hawaiian Astronomical Society P.O. Box 17671 Honolulu, Hawaii 96817

> President Chris Peterson 956-3131 chrisp@higp.hawaii.edu

Vice President Barry Peckham 524-2450 barry@litebox-telescopes.com

> Secretary Gretchen West 735-0482 gwest@pixi.com

Treasurer Jim MacDonald 261-2162 jim.macd@verizon.net

Board Members-at-Large John Gallagher 683-0118 gallaghej002@hawaii.rr.com Steve Huffman shuffman@sacredhearts.org

The Astroneus Editor

Paul C. Lawler 395-8121 paul@kilolani.net

HAS Webmaster Peter Besenbruch prb@lava.net

*The* **Astroneus** is the monthly newsletter of the Hawaiian Astronomical Society. Some of the contents may be copyrighted. We request that authors and artists be given credit for their work. Contributions are welcome. Send them to the Editor via e-mail. The deadline is the 15<sup>th</sup> of each month. We are not responsible for unsolicited artwork.

# Observer's Notebook—April 2005

#### **Planets Close To the Moon** Times are Hawaii Standard Time

Apr 3, 14h, M 3.9° SSE of Mars (64° from sun in morning sky) Apr 4, 01h, M 4.7° SSE of Neptune (58° from sun in morning sky) Apr 5, 14h, M 2.9° SSE of Uranus (37° from sun in morning sky) Apr 7, 07h, M 2.6° SSE of Mercury (15° from sun in morning sky) Apr 15, 17h, M 5.1° N of Saturn (85° from sun in evening sky) Apr 22, 07h, M 0.59° S of Jupiter (159° from sun in evening sky)

Venus is closer than 15° from the sun when near the moon in April.

#### Other Events of Interest Times are Hawaii Standard Time

- Apr 3, 05h, Jupiter at Opposition Apr 8, 10:34h, Moon New (Annular/Total solar eclipse visible from the South Pacific, Panama, Columbia, and Venezuela) Apr 13, 02h, Mars 1.2° SSE of Neptune (66° from sun in morning sky) April 16, Astronomy Day April 22, Lyrid Meteors April 24, 00:08h, Moon Full April 26, 06h, Mercury at greatest elongation
- (27.2° west of the sun in morning sky)

Planets in April Mercury Venus Mars Venus is too will be visible in close to the sun to the east just before view this month sunrise during the last 10 days of April. Saturn Jupiter at opposition Excellent viewing early in the month and from dusk until about 10:30 pm. Magnitude is visible all night. Best observed late in is +0.2. the evening.



# **Meeting Minutes**

H.A.S. Secretary

The March 1, 2005 meeting of the Hawaiian Astronomical Society was called to order at 7:37 p.m. by Chris Peterson. at the Atherton Halau.

Activities for April - If you are interested in helping contact Gretchen. State Science Fair - April 4th and 5th. **IFA Open House** - Sunday April 10, 2005, 11 a.m. to 4 p.m.

Astronomy Day - April 16, 2005. Barry Peckham will contact *Kahala Mall* Management and *Barnes and Noble* about our set up.

**Banner** - Purchase is complete at a cost of \$170.82. It is yellow with stars, planets, and words inviting interested individuals to *After Dark in the Park*.

**Coronado PST** - Paul Lawler ordered the PST \$499.00 + \$20 to \$30 shipping. It should be here by the next meeting and available for rental by qualified HAS members.

**Keys for Dillingham** - New gate and lock at Dillingham Field. We have one key and will inquire about acquiring additional keys.

Molokai Ranch in May - Scheduled for the weekend of May 6 and 7, 2005. We almost have group large enough to go to Molokai in May. Deposit of \$129.00 to be paid to HAS by March 15, 2005. Food and transportation is not included in this package. Those participating in the weekend need to make their own travel arrangements. There is a Shuttle to the ranch and those going over may want to travel together so that you can share expenses going and coming back. Meals at the Ranch are quite pricey but you can arrange for them directly with the Ranch if you so choose.

#### **New Business**

Video tour of Cassini Mission - Chris Peterson shared spectacular images from the *Cassini Mission*. He allowed members to view the latest shots of Saturn, its moons, and Jupiter. Along with these new views were shots of the Titan landing sites, multi-ring basins on Titan on radar image maps, and images from the Mars rovers. **Light Pollution** - HAS will write to ask that the lights along that stretch of Farrington Highway be shielded because the lighting that is destroying the dark qualities of the viewing area.

**Planetary Data Center Talks** -Speaker Toby Owen will discuss the Cassini Mission at the next talk March 29, 7:30 p.m. in room 544 of the POST Building, UH.

**Night-Sky Network** - John brought the new kit, *Our Galaxy, Our Universe* and shared a short video about the kit for use at star parties.

**Future Speaker** - Karen Meech will most probably speak about the U.H. Astrobiology Institute at the April Mtg. She may be coaxed into a short update on Deep Impact.

Sun/Earth Day - March 20 (Sunday) Celebration of ancient observations and observers of the Vernal Equinox.
Beginner<sup>1</sup>s Topic - VP Barry Peckham spoke briefly about the advantages of the somewhat inexpensive *Galileo* binoculars. These poroprism binoculars are well made and are fully multi-coated. Those interested in any binoculars should look for binoculars make with BAK4 glass.
Star Facts - Barry provided the membership with 25 "fun and interesting" facts about the star Canopus, gleaned

(Continued on page 5)

The Astroneus

# Meteor Log—April 2005

April, like February, can bring more than usual sporadic fire balls. The main event, the Lyrids, is a bit messed up by a bright Moon. Where is Xena when you need her?!

Friday the 22, the Lyrids. Radiant 18h04m +34 deg.

The maximum is forecast for 10h30m UT or 12:30 AM local. With full Moon on the 24th, the Lyrids could hardly be worse-placed. If the Moon were not messing things up we would be in an ideal location for this shower. Lyrids are swift, occasionally spectacularly bright, with about 20 to 25% leavings persistent trains.

If you are interested in observing meteors contact Tom Giguere on Oahu at 672-6677 or write to: Mike Morrow, P.O. Box 6692, Ocean View, Hawaii 96737

# **Special Notice**

HAS will publish a complete listing of Club members in the May 2005 issue of the Astronews. This publication is required by Club by-laws, Article III, Section 2 Para C(e) and Article VIII, Section 1B. Unless notified otherwise, this list will include all member's names, addresses, and phone numbers. If you wish to have some or all of your data excluded, please notify the Club Treasurer, Jim MacDonald before April 15 by sending him an e-mail at jim.macd@verizon.net or by written notice to the Club's post office box listed on the back page of this newsletter. Please be advised that this listing is for Club members' personal use only in contacting one another. HAS does not make this list available, nor do we sell it to anyone for any purpose.

#### President's Report (Continued from page 2)

When people in the future look back to our time, they will surely agree that the pace of discovery did not slacken in the early 21st century. How much more can we look forward to learning in our lifetimes? I can hardly wait to find out.

Chris

# *Minutes* (*Continued from page 4*) from the book *100 Greatest Stars*.

**E-Mail from Wesley Swift** - Member of the Von Braun Astronomical Society of Huntsville Alabama. He and his wife will be staying on "one of the smaller islands." and are looking for someone to help them view the *Deep Impact* mission. Contact Chris Peterson if you are interested.

Monstrous Black Hole - at the Center of our galaxy. Steve Huffman shared

an article from the March 1st Honolulu Advertiser which mentioned the "monstrous black hole" at the center of our galaxy and the three other stars that seem to be holding their own as they circle the massive structure. The meeting was adjourned at 9:10 p.m. Refreshments were served followed by a short Planetarium show.

Respectfully Submitted, Gretchen West



**Podcasting** (Continued from page 1) and powerful transmitters and is a very expensive venture. Podcasting, on the other hand, requires little more than a microphone and a PC (or, of course, a Macintosh). If you are familiar with the concept of *blogging* think of podcasting as audio blogging.

Here's how it works in a nutshell. You prepare a podcast by recording an audio clip anywhere from 3 to 30 minutes in length. You can then make your clips (or other files) available on an Internet server where it is distributed via an **RSS** (really simple syndi-

#### at <www.podcast.net>.

Some of the ones I listen to are *Slacker Asronomy* and the aforementioned *Science@NASA*. If you want an example of a truly "amateur" astronomy related podcast, listen to the *Regulus* astronomy newsletter. You will soon hear why a good microphone and preamp are the best investments a budding podcaster can make.

Hopefully in the future, syndicated radio programs like *Earth & Sky* and David Levy's *Let's Talk Stars* will be available as podcasts. The great thing about listening to pro-



cation) 2.0 feed. Anyone on the Internet can then "subscribe" to your feed.

If you use *Firefox* as your web browser (and you should), subscribing to RSS feeds is simplicity itself. Just look for the little orange icon in the lower right corner. Otherwise you can use an RSS reader available for free on the Internet (Google is your friend). For audio RSS content, using a software program like *iPodder* automatically downloads and transfers the content of your subscriptions to your *iPod*, so you can listen at your leisure.

Okay, so how does this relate to astronomy, you ask? Well... there are already astronomy related podcasts, and even NASA has jumped on the bandwagon. You can find them easily at podcast directory sites like the one grams as podcasts is that you don't have to be in front of your radio at the right time, and you can take the programming with you anywhere (not to mention fast forward and rewind).

Should you happen to have interests other than astronomy, there are podcasts available on a wide variety of subjects, some very professionally done, some less so.

In fairness, I should note that you do not have to have an Apple *iPod* to enjoy podcasts. You can use *iPodder* and *iTunes* (both free) to listen to podcasts on your PC or Macintosh It just won't be quite as portable. Additionally, you can use any MP3 player—it doesn't *have* to be an iPod (although this author hasn't found a better one yet.).

# **School Star Parties**

School and Group Star Parties are being coordinated by Forrest Luke. If you are contacted for a school star party, please have the school contact Forrest directly by phone at 623-9830 or via e-mail at <lukef003@hawaii.rr.com>. As a reminder, upcoming scheduled school star parties are:

09 Apr 2005	Bishop Museum Family Science Night
15 Apr 2005	Pearl Harbor Elementary
26 Apr 2005	Ala Wai Elementary
29 Apr 2005	Iroquois Point Elementary (alt. May 6)
13 May 2005	Lanakila Elementary
27 May 2005	Kipapa Elementary
03 July 2005	Deep Impact Night (Bishop Museum)

# Treasurer's Report

by Jim MacDonald

## HAS Financial Report as of March 15, 2005

Initial Balance:	\$5,145.13*
Receipts:	
Astronomy Payment	145.00
Donations	
Dues Received	187.00
S&T Payments	32.95
T-Shirt Sales	
Total Income:	
Expenses:	
Astronews/Postage	144.65
Magazine Subscriptions	346.97
Equipment (Coronado PST)	
Bank charge (checks)	
Refreshments/Excise Tax	
Total Expenses:	\$1054.90
Ending Balance:	\$4,065.18

The club welcomes *Wallace Izuo* as a new member this month. In addition, many thanks to those renewing their membership and to **Wilfred** and **Helen Kekoanui**, **Nathaniel Shippen**, **Paul Gracie** and **Jeffrey Brennan** for their generous donations. Clear skies to all

\*Error correction: Last month's final balance did not include cost of the Waikele banner.

Hawaiian Astronomical Society P.O. Box 17671 Honolulu, HI 96817





Name that Cluster. A prize will be awarded to the person who correctly identifies this cluster by at least two of its names. e-mail your answers to *paul@kilolani.net*