

# GuideStar

**February, 2006**

*At the February 3 meeting...*

## **Time Capsule & Picnic Wrapup**

**Steve Goldberg**

*Assuming we don't have another hurricane Rita (or equivalent) the HAS Picnic and time-capsule opening will take place on January 21. If you weren't there (and we hope you were), Steve will re-open the time capsule and show you what he found inside.*

*Also, you'll hear about upcoming events:*

- **HAS Banquet (March)**
- **Texas Star Party (April)**
- **and lots more.**

### **Highlights:**

**Variable Star Photometry.....4**  
**Snowstorm on Pluto.....8**  
**HAS Banquet Announcement .....9**

**HAS Web Page:**

<http://www.AstronomyHouston.org>

See the GuideStar's Monthly Calendar of Events to confirm dates and times of all events for the month, and check the Web Page for any last minute changes.

### **Schedule of meeting activities:**

All meetings are at the University of Houston Science and Research building. See the inside back cover for a map to the location.

Novice meeting: ..... 7:00 p.m.  
Bill Leach – "Getting Started in Astronomy"

Site orientation meeting: ..... 7:00 p.m.  
Classroom 121

General meeting: ..... 8:00 p.m.  
Room 117

See last page for a map and more information.

## The Houston Astronomical Society

The Houston Astronomical Society is a non-profit corporation organized under section 501 (C) 3 of the Internal Revenue Code. The Society was formed for education and scientific purposes. All contributions and gifts are deductible for federal income tax purposes. General membership meetings are open to the public and attendance is encouraged.

### Officers & Past President

President: Steve Sartor .....H:281-370-3544  
 Vice Pres: Bill Leach.....H: 281-893-4057  
 Secretary: Doug McCormick.....H:  
 Treasurer: Bill Flanagan .....H:713-699-8819

### Additional Board Members

	Liaison responsibility
Steve Goldberg.....713-721-5077	
Don Pearce.....713-432-0734	
Bob Rogers.....281-460-1573	
Kenneth Miller.....936-931-2724	
Allen Gilchrist.....	

### Committee Chairpersons

Audit .....	Tom Blocker .....	
Education.....	Susan Kennedy.....	281-376-3262
Field Tr./Obsg.....	Clayton Jeter.....	281-573-1337
Novice.....	George Stradley.....	281-376-5787
Observatory.....	Kirk Kendrick .....	
Program.....	Don Pearce .....	
Publicity.....	John Missavage.....	
Telescope.....	Mike Hamlin .....	281-489-2926
Welcoming.....	Susan Kennedy.....	281-376-3262
	Darlene Sartor.....	281-370-3544

### Ad-Hoc Committee Chairpersons

Historian .....	Leland Dolan.....	713-688-0981
Librarian.....	Peggy Gilchrist.....	281-443-8773
Logo Mds Sales.....	Judy Dye.....	281-498-1703
Long Range Plan.....	Bill Leach.....	281-893-4057
Parliamentarian .....	Kirk Kendrick .....	281-633-8819
Publ. Star Party .....	Richard Nugent .....	713-524-1993
Rice U. Coord.....	Matt Delevoryas .....	713-666-9428
Schedule Obs'v'ty .....	Steve Goldberg .....	713-721-5077
Texas Star Pty .....	Steve Goldberg .....	713-721-5077

### Special Interest Groups & Help Committees

These are now listed on the inside of *GuideStar* (not every month). See the Table of Contents

### Advisors

Dr. Reginald DuFour, Rice Univ.  
 Dr. Lawrence Pinsky, U. of H.  
 Dr. Lawrence Armendarez, U. of St. Thomas

### Dues and Membership Information

Annual Dues:Regular .....	\$36.00
Associate .....	\$6.00
Sustaining .....	\$50.00
Student .....	\$12.00
Honorary .....	None

All members have the right to participate in Society functions and to use the Observatory Site. Regular and Student Members receive a subscription to *The Reflector*. Regular, Student, and Honorary Members receive *The GuideStar*. Associate Members, immediate family members of a Regular Member, have all membership rights, but do not receive publications. Sustaining members have the same rights as regular members with the additional dues treated as a donation to the Society. *Sky & Telescope* mag \$32.95/year, *Astronomy* mag \$29/year -- see club treasurer.

Membership Application: Send funds to address shown on outside cover of *GuideStar*. Attention - Treasurer, along with the following information: Name, Address, Phone Number, Special Interests in Astronomy, Do you own a Telescope? (If so, what kind?), and where you first heard of H.A.S.

## Table of Contents

3 .....	February/March Calendar
.....	Web site
4 .....	Observations of the Editor
6 .....	Observatory Dury Roster
.....	Want Ads
7 .....	Special Help Volunteers
.....	Renewal Informaton
8 .....	Snowstorm on Pluto
9 .....	HAS Banquet Announcement
10 .....	Banquet registration form
11 .....	Minutes of Jan., 2006 Meeting

## Special Interest Group Listing

Any member who wants specific information on a SIG listed below may call the listed individual. Also, see the "Ad Hoc Committee Chairpersons" on the inside front cover and the "Special Help Volunteers" listing (not in every issue).

Advanced.....	Bill Leach.....	281-893-4057
Comets .....	Don Pearce .....	713-432-0734
Lunar & Planetary.....	John Blubaugh .....	713-921-4275
Occultations & Grazes.....	Wayne Hutchison .....	713-827-0828
Advanced.....	Bill Leach.....	281-893-4057

## Other Meetings...

**Fort Bend Astronomy Club** meets the third Friday of the month at 8:00 p.m. at the First Colony conference Center. Novice meeting begins at 7:00, regular meeting begins at 8:00. Web site: <http://www.fbac.org>

**Johnson Space Center Astronomical Society** meets in the the Lunar and Planetary Institute on the 2nd Friday of each month. Web site: <http://www.ghg.net/jscas/>

**North Houston Astronomy Club** meets at 7:30 p.m. on the 4th Friday of each month in the Teaching Theatre of the Student Center at Kingwood College. Call 281-312-1650 or E-mail [bill.leach@nhmccd.edu](mailto:bill.leach@nhmccd.edu). Web site: [www.astronomyclub.org](http://www.astronomyclub.org)

# February/March Calendar:



Photo by Scott Mitchell

**Date Time Event**

## February 2006

1		Saturn near the Behive (M44)
3	7:00 p.m.	Novice Presentation - UH
	8:00 p.m.	General membership meeting - UH
5	00:29 a.m.	First Quarter Moon
		Mars just south of Moon
12	10:44 p.m.	Full Moon
13	7:00 p.m.	Moon at apogee
24		Mercury at greatest eastern elongation
27	6:31 p.m.	New Moon

## March 2006

3	7:00 p.m.	Novice Presentation - UH
	8:00 p.m.	General membership meeting - UH
5	9:00 a.m.	Moon near Pleiades
6	2:16 p.m.	First Quarter Moon
11	6:30 p.m.	<b>HAS Banquet (see details this issue)</b>
14	5:36 p.m.	Full Moon
17	5:00 a.m.	Spica .3° S of Moon
19	8:00 a.m.	Jupiter 5° N of Moon
22	7:21 a.m.	Last Quarter Moon
28	10:17 p.m.	New Moon - Total solar eclipse (but not here)

Send calendar events to [JBlubaugh@aol.com](mailto:JBlubaugh@aol.com)  
or call 713-921-4275.

**Check the web site:**  
**[www.astronomyhouston.org](http://www.astronomyhouston.org)**  
**Webmaster: Bob Rogers**  
**[siteworkerbob@hotmail.com](mailto:siteworkerbob@hotmail.com)**

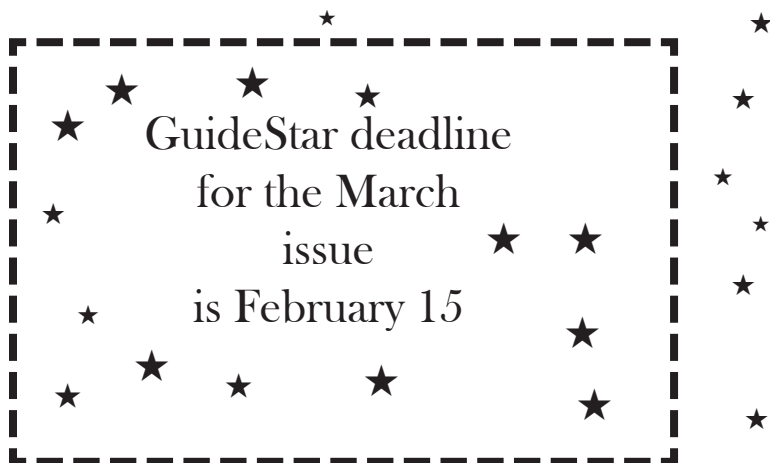
The Houston Astronomical Society Web page has information on the society, its resources, and meeting information.

Want your astronomy work and name on the Internet for the whole world to see? Have some neat equipment? Pictures in film, CCD, hand drawings or video format are all welcome on the page. Do you have an idea to improve the page? I'm listening. Send me Email at [siteworkerbob@hotmail.com](mailto:siteworkerbob@hotmail.com).

## Special "Help" Volunteers

Any member who wants specific information on an astronomical topic may call special help volunteer (listed in most issues of the *GuideStar*). If you have a moderate knowledge of a special subject and would be happy to have others ask you about that subject, let the editor know and your subject, name and phone will be listed in *GuideStar* in the future.

**At the HAS meeting, please remember to park across from Entrance 14.**



---

## Observations... of the editor

by Bill Pellerin, GuideStar Editor

.....

### *I missed the January meeting!!!*

...so I'm happy to print, and to read, the minutes of the meeting. I sure hated to miss this one, as it sounded like a very interesting topic. I'll be there for the February meeting, though.

As I write this on January 15, I note that this is full-moon weekend so deep sky observing is put off for at least a week. The picnic is on the coming weekend and I'm sure we're all hoping for good weather. It'll be last quarter moon so the first half, at least, of the night will be good for observing.

### *Thanks for the feedback on the GuideStar*

I received a few emails this month from HAS members telling me that they read the *GuideStar* either by printing it or by reading it on-line. Thanks for these comments. It's good to know that the publication is being read.

### *Some new technologies you may wish to try*

**Podcasts** -- Podcasts are MP3 files of radio programs, lectures, or special interest discussions of various topics. There are several programs of interest. There's *Science Friday* which is part of the *Talk of the Nation* series on NPR. There's a science show in the Australian Broadcast Network that's available as a podcast, and many, many, more. They're free and can be downloaded to almost any MP3 player (it doesn't have to be an IPOD) and heard at your convenience.

**Celestron SkyScout** -- This was just announced at the Consumer Electronics Show a few weeks ago. It's a small gadget that'll guide you to objects in the sky. It knows where they are because it has a GPS receiver inside. It's not available for purchase right now, but this looks like great fun. Check out the Celestron web site ([www.celestron.com](http://www.celestron.com)) for more information.

**Sirius radio** -- Sirius satellite radio provides a wide selection of channels of radio (music, sports, information) and has a new radio (S50) that allows you to record shows for later playback. There's a show on Sunday night called *Are We Alone* with Seth Shostak of the SETI institute, for example. There's another called *Tech Nation* and yet another called *The Infinite Mind*.

**Free book** -- the best deal of all. Here's something you'll really want. This is a free guide to observing in 2006 that you download as a PDF and either view on your computer or print. I haven't been through the book in great detail, and I've found at least one error (an image of a galaxy labeled 'Mars'), but the writing is good and

the price is sooooo right. (It doesn't compete with the *Observer's Guide*.) Click the URL below or type it URL into your browser.

[http://www.universetoday.com/am/publish/whatsup\\_2006\\_book.html](http://www.universetoday.com/am/publish/whatsup_2006_book.html)

### *My photometry experiments...*

Last month I told you that I had imaged two regions of the sky. The area around M1, and the area of M38. I also told you that my attempts to measure the magnitudes of the stars in the images did not produce good results. In fact, my results were substantially worse than I expected.

I spent some time thinking about why my results were off.

- Undersampling of the star images -- The star to be measured only appears on (worst case) one pixel of the CCD, and it's entirely possible that the one pixel is either more or less sensitive than the average of its neighbors.
- The stars that I was trying to measure were variables. If so, this would account for a measurement error owing to the fact that the measurement I would get would be dependent on where the star was in its cycle of variability.
- The magnitude information of the stars that I used could have been incorrect. It could be that my measurements were better than the reference data I had (from the Hubble guide star catalog).

Ok... let's look at these.

*Continued...*

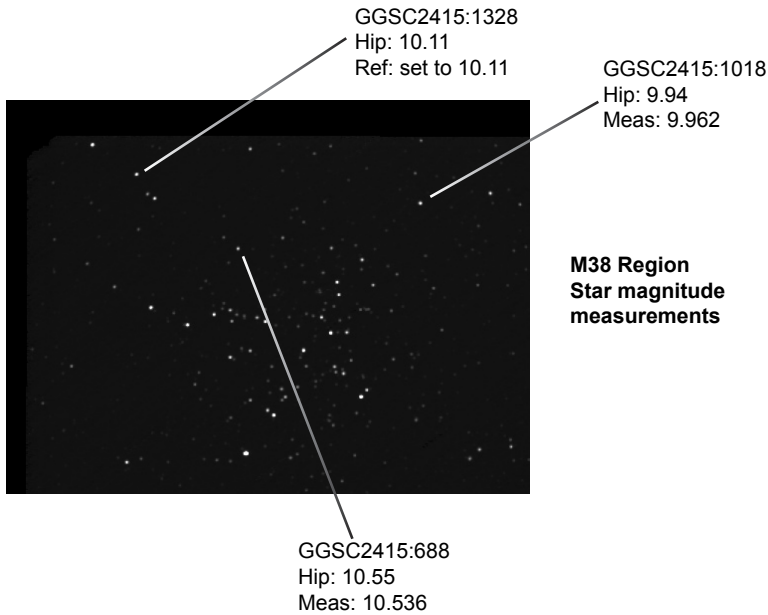
---

## *Logo Sales*

It is almost time to order the *Observer's Handbooks* for the next year. They will sell for approximately \$25.00. If you would like to order one or more, please e-mail me at [judyadye@aol.com](mailto:judyadye@aol.com), or call me at 281-498-1703. I would like to have some ideas as to how many to order.

---

## Observations... from previous page



- Undersampling of the star images -- It's easy to zoom in on the image enough to see whether the star is registered across more than one pixel. It turns out that the stars in my images are, in fact, spread across multiple pixels. And, since the final image consists of a stack of short images any tracking error in the mount would assure that the starlight does not fall squarely on the same pixel every time.
- The stars I was measuring were variables? It's easy to look these up and see if they're variables or not. They were not identified as variables.
- The magnitude information I used was incorrect. I used the Hubble guide star catalog data for my comparison, and this data is known to be incorrect. In fact, the AAVSO (American Association of Variable Star observers, [www.aavso.org](http://www.aavso.org)) does not want observers to report their observations based on Hubble guide star comparisons. Well, what other data did I have? In fact, the SkyTools (software at [www.skyhound.com](http://www.skyhound.com)) database contains Hipparcos data, which is known to be more accurate.

This turned out to be the problem. When I compared my measured values to the Hipparcos values for star magnitudes the results were considerably better. The picture above has one star as a reference (GSC2415:1328), and two stars whose magnitude was determined by measurement (GSC2415:1329 and GSC2415:1018). You can see that the measured values

match the Hipparcos values very closely. For the 10 stars that I measured in this image, the average difference from the Hipparcos data was .07 magnitude. As they say, "That's close enough for science".

I've printed some AAVSO star charts for stars that are available for measurement this coming week-end. I hope to be able to get some 'real' data that I can submit. I'll let you know how it goes.

### *Other...*

It's Thursday, January 19th as I type this. The New Horizons Pluto mission left the launchpad today headed toward Pluto. It'll take a long time to get there, but it'll be exciting to watch the progress on this one. We'll have plenty of time to watch it, too, since it'll take 9 years to get to Pluto.

I heard a story on NPR this morning about Pluto and its moon Charon. In response to an earlier story, someone had written NPR saying that they had mis-pronounced the name of the moon. The newscaster had pronounced the name so that it sounded like 'Sharon'. The listener said that the proper pronunciation was 'Karen'. To resolve the matter, NPR called the Naval observatory in Washington (a scientist at this observatory had discovered and named Charon). Speaking to someone who knew the discover's intention they found out that 'Sharon' is correct.

However, the pronunciation 'Karen' is correct for the 'ferryman of the dead' in Greek mythology. Charon was responsible for ferrying souls across the river Styx.

Can you win a bar bet with this information? Not likely.

*Until next time...  
clear skies and new moons!*

*..Bill*

# Observatory Duty Roster

by Kirk Kendrick, Observatory Chairman

★  
★ ★ ★

This is the duty list for February. If you are listed in this roster, please be sure to contact your supervisor for any information that you may need and the date and time to be at the site. You may change from site duty to open house or from open house to site duty by pre-arrangement with the Site Supervisor for that month. Changes between months require Observatory Chairman coordination.

**February (06) Supervisor ..... Bob Rogers .....281-460-1573**

Jerod Kendrick .....	Site			★	
Robert Kuna .....	Members Observatory Night	02-xx-06		★	★
Roger Lee .....	Site				★
Jay Levy .....	Members Observatory Night	02-xx-06			★
Mary Lockwood .....	Members Observatory Night	02-xx-06		★	
John Missavage .....	Site				★

Please remember that Site work can be done anytime and does not have to be done just before Members Observatory Night. Contact your Site Supervisor for details. Names are selected for Site Duty using the current Alphabetical listing for Observatory Key Holders. If any member knows of a conflict please call me before your name is listed.

★  
★  
★  
★  
★  
★  
★  
★  
★

## Want Ads

**For Sale: 13.1" Colter "Odyssey"**

13.1" Colter "Odyssey", 1.8 tele-vue barlow, 32mm plossl tele-vue 10.5mm Tele-Vue, 21.5mm rke Edmonds, Lumicon UHC filter, Celestron eyepiece filter set, 7 x 50 finder scope, Telerad finder, tube cap, light box and Skyatlas 2000 maps, Burnham's Celestial Handbook, vol 1,2,3., That's the details, everything for \$600.00.  
E-mail: roy60@ev1.net  
Phone: 713-434-2647

**For Sale: Meade ETX 90EC Telescope**, and Meade tripod Used once. Includes Autostar controller. Paid \$850 new 6 months ago – no time for a new hobby. Includes all original boxes and manuals, and carrying case for scope and tripod. Before I put it on eBay, I'd like someone local to enjoy this scope. I'll take \$500 or any reasonable offer. Contact Bill at [beley8@houston.rr.com](mailto:beley8@houston.rr.com).

*Email your ads to Bob Rogers, our Webmaster, at [siteworkerbob@hotmail.com](mailto:siteworkerbob@hotmail.com)*

# Special "Help" Volunteers

Any member who wants specific information on a subject listed below may call the individual listed. If you have a moderate knowledge of a special subject and would be happy to have others ask you about that subject, let the editor know and your subject, name and phone will be listed in *GuideStar* in the future. Note that we have listed a few possible areas where you might volunteer, but, of course, you are not limited to these. You can also have a specialty which is a sub-group of another. Note that the number of names for any subject is not limited to only one person. Also see the "Ad Hoc Committee Chairpersons" on the inside front cover and the "Special Interest Groups Listing" article.

Asteroids .....	Barbara Wilson .....	281-933-1289	History, Astro'y - General .....	Leland Dolan .....	713-688-0981
Astrometry .....	Richard Nugent.....	713-910-5945	.....	Ricardo Palmeira .....	713-669-1409
Astrophotography .....	Steve Goldberg .....	713-721-5077	History, Astro'y - Amateurs...	Tom Williams .....	713-526-2868
Beginning in Astronomy .....	Peggy Gilchrist .....	281-443-8773	Mathematics, Astronomical ..	Richard Nugent.....	713-910-5945
.....	Amelia Goldberg .....	713-721-5077	Messier Objects.....	Novice Committee (see	
CCDs & Astrophotography...	Randy Brewer.....	281-421-1550	Photometry .....	Open	
Comets .....	Kenneth Drake.....	936-890-3735	Radio Telescopes.....	John Hiatt .....	713-464-4010
.....	Don Pearce .....	713-432-0734	Satellites, Artificial.....	Open	
Computers.....	Matt Delevoryas .....	713-795-0808	Solar Observing .....	Larry Mitchell.....	281-448-8700
.....	Leland Dolan .....	713-688-0981	Spectroscopy .....	Open	
.....	Ricardo Palmeira .....	713-669-1409	Thin Crescent Moons.....	Don Pearce .....	713-432-0734
Cosmology .....	Ricardo Palmeira .....	713-669-1409	Telescopes .....	Clayton Jeter.....	281-573-1337
Deep Sky .....	Larry Mitchell.....	281-448-8700	Variable Stars .....	Barbara Wilson .....	281-933-1289
.....	Barbara Wilson .....	281-933-1289	.....	Tom Williams .....	713-526-2868
Double Stars.....	John Blubaugh.....	713-921-4275	Video .....	Larry Mitchell.....	281-448-8700
Drawing (Sketching).....	Scott Mitchell .....	713-461-3020			
Herschel Objects .....	Larry Mitchell.....	281-448-8700			

## Membership Renewals...

**Your membership is renewable on January 1 of each year.**

Total yearly dues are \$36.

If you paid your dues any time in 2005, your payment for 2006 is due as of January 1, 2006. New members joining in 2006 will pay only for the months remaining in the calendar year.

Magazine subscriptions can be renewed at any time and the renewal does not need to be synchronized with your HAS dues.

Membership in the Houston Astronomical Society is one of the great bargains in Astronomy. For a regular membership of \$36 you get the opportunity to support an active and growing organization, you get the monthly *GuideStar* newsletter, and you get access to the outstanding H.A.S. observing site near Columbus, Texas. (You must attend an orientation, given monthly, to use the site.) And, after two months of membership you can borrow, at no charge, one of the Society's loaner telescopes. It's the best deal in town, we think. Please renew your membership when it expires.

Encourage other astronomy enthusiasts to join the organization as well. It's a great group.

**Thanks!**

---

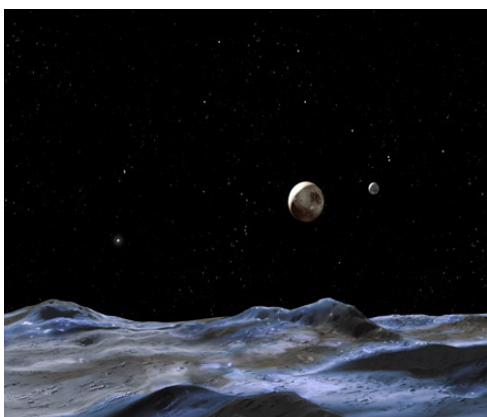
# Snowstorm on Pluto

---

By Dr. Tony Phillips

There's a nip in the air. Outside it's beginning to snow, the first fall of winter. A few delicate flakes tumble from the sky, innocently enough, but this is no mere flurry.

Soon the air is choked with snow, falling so fast and hard it seems to pull the sky down with it. Indeed, that's what happens.



*This artist's rendering shows how Pluto and two of its possible three moons might look from the surface of the third moon. Credit: NASA/ESA*

Weeks later when the storm finally ends the entire atmosphere is gone. Every molecule of air on your planet has frozen and fallen to the ground.

That was a snowstorm—on Pluto.

Once every year on Pluto (1 Pluto-year = 248 Earth-years), around the beginning of winter, it gets so cold that the atmosphere freezes. Air on Pluto is made mainly of nitrogen with a

smattering of methane and other compounds. When the temperature dips to about 32 K (-240 C), these molecules crystallize and the atmosphere comes down.

“The collapse can happen quite suddenly,” says Alan Stern of the Southwest Research Institute. “Snow begins to fall, the surface reflects more sunlight, forcing quicker cooling, accelerating the snowfall. It can all be over in a few weeks or months.”

Researchers believe this will happen sometime during the next 10 to 20 years. Pluto is receding from the warmth of the Sun, carried outward by its 25% elliptical orbit. Winter is coming.

So is New Horizons. Stern is lead scientist for the robotic probe, which left Earth in January bound for Pluto. In 2015 New Horizons will become the first spacecraft to visit that distant planet. The question is, will it arrive before the snowstorm?

“We hope so,” says Stern. The spacecraft is bristling with instruments designed to study Pluto's atmosphere and surface. “But we can't study the atmosphere if it's not there.” Furthermore, a layer of snow on the ground (“probably a few centimeters deep,”

estimates Stern) could hide the underlying surface from New Horizons's remote sensors.



Stern isn't too concerned: “Pluto's atmosphere was discovered in 1988 when astronomers watched the planet pass in front of a distant star—a stellar occultation.” The star, instead of vanishing abruptly at Pluto's solid edge, faded slowly. Pluto was “fuzzy;” it had air. “Similar occultations observed since then (most recently in 2002) reveal no sign of [impending] collapse,” says Stern. On the contrary, the atmosphere appears to be expanding, puffed up by lingering heat from Pluto's waning summer.

Nevertheless, it's a good thing New Horizons is fast, hurtling toward Pluto at 30,000 mph. Winter. New Horizons. Only one can be first. The race is on....

Find out more about the New Horizons mission at <http://pluto.jhuapl.edu>. Kids can learn amazing facts about Pluto at [spaceplace.nasa.gov/en/kids/pluto](http://spaceplace.nasa.gov/en/kids/pluto).

*This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.*

## Remember --

All HAS memberships are due for renewal in January, 2006. Our membership year now corresponds to the calendar year.

Mail your dues to the address on the back page of this *GuideStar* or bring your payment to the meeting in March.



---

# Houston Astronomical Society

# 2006 Banquet

---

at  
**The West Loop Marriott**  
**1750 West Loop South @ San Felipe**  
**Topaz Room**  
**March 11, 2006**

## **Dr. Peter Schultz** **- featured speaker**

Deep Impact mission - performed pre-mission experiments and post-mission spectroscopy using data from the Deep Impact mission.



### **Here's an account of the impact event**

Along with a team of NASA scientists, the professor of geological sciences at Brown University was huddled in a conference room at the Jet Propulsion Laboratory in Pasadena, Calif., to watch a space probe get plowed over by Tempel 1, a comet measuring about half the size of Manhattan. At 11:52 p.m. Pacific Standard Time, the probe hit its mark. There was a small flash, then a big one.

Schultz screamed. The \$333-million experiment was, literally, a smashing success.

"It was like rooting for a race horse that finally made it over the finish line," Schultz recalled. "When we saw that flash, I thought 'Oh my God, look at that. Look at that.' And the room just erupted."

Schultz landed a spot on the comet mission, dubbed Deep Impact, because he is an expert

in impact cratering -- the science of what happens when a massive, fast-moving cosmic train slams into something. For twenty-five years, at NASA Ames Research Center in Silicon Valley, Schultz has loaded a three-story gun with glass, copper or meteorite beads. These are fired at piles of sand or ice, dust or mud. Once they hit their targets, at speeds ten times faster than a speeding bullet, the projectiles create brilliant flashes, dramatic sprays of debris, and impressive craters.

## **Agenda**

---

6:30-7:30 p.m. .... Registration & Cash Bar  
7:45 ..... Meal  
8:30 ..... Featured Speaker

All invited! HAS Members and non-HAS members

### **Dinner choices**

---

Chicken Zydeco  
Rosemary Pork Loin  
Tilapia Zydeco

Registration sheets will be at the next meeting.

Price of meals will be \$30.00 each. All checks should be made out to:

Houston Astronomical Society  
Attn: Judy A. Dye - CHAIRMAN  
12352 Newbrook  
Houston TX 77072-3910  
281-498-1703  
judyadye@aol.com

Committee Chairman: Judy Dye,  
Committee Members: Michael Dye, Don Pearce,

# HAS Annual Banquet Registration Form

Event Date: March 11, 2006

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Number of people in your party \_\_\_\_\_

Home phone number: \_\_\_\_\_

Work phone number: \_\_\_\_\_

Club Affiliation:  HAS  FBAC  NHAC  JSCAS  ASSET

Names of persons :                      Choice of entrée:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

Dinner choices (mark the number of each meal)

Chicken Zydeco \_\_\_\_\_

Rosemary Pork Loin \_\_\_\_\_

Tilapia Zydeco \_\_\_\_\_

Total number of meals: \_\_\_\_\_

Total Due: (# of meals x \$30.00) \_\_\_\_\_

Dinner includes Chef's choice of dessert, coffee or tea, gratuity, tax, and parking.

Make checks payable to Houston Astronomical Society.

Mail this form to:

Houston Astronomical Society  
Attn: Judy Dye, Banquet Chairman  
12352 Newbrook  
Houston TX 77072-3910  
281-498-1703  
judyadye@aol.com

Dress Code: Business Casual to Semi-Formal

## Minutes... from page 11

- The moon was 8 degrees 5 minutes from the sun. Don also highlighted another opportunity for us to observe a thin moon on March 29. However, it's competing for our attention with another event, a total eclipse of the sun.

## Program

Don Pierce introduced the featured speaker for the evening, HAS Member Larry Mitchell, who delivered his presentation entitled, "The Arp Controversy Revisited – Round II." Larry presented an overview of Dr. Arp's theories, and many observational examples supporting them. After questions, Don Pierce presented Larry with a gift of appreciation from the club.

Steve Sartor pronounced the meeting adjourned at 10:05 p.m.

## Claim Your Fame Write for GuideStar

Want new information in the *GuideStar*? Write it!! You, too, can be published here.

- What are you doing in astronomy?
- What are you doing that's new and exciting?
- What have you read recently (book report!)?
- What new and interesting software are you using?
- Did you have an observation that was especially interesting?
- Any 'lessons learned' from observing attempts?
- What are you looking forward to at the Texas Star Party this year?

Send your materials to Bill Pellerin, the GuideStar editor at:

*BillPellerin@sbcglobal.net*

---

**Minutes**  
**the January, 2006 Meeting of the**  
***Houston Astronomical Society***

---

The January, 2006 meeting of the Houston Astronomical Society was called to order at 8:07 p.m. by Steve Sartor.

**General Announcements:**

- Steve Sartor welcomed everyone and recognized new members and guests.
- There were three new members present.
- There was one visitor present.

**Announcements:**

- Kirk Kendrick spoke regarding the Annual Picnic scheduled for January 21, 2006 at the HAS observatory in Columbus. At the picnic this year, we are celebrating the 50th anniversary of the club with the opening of the time capsule at 2 p.m. and a chili dinner at 4 p.m. We need a headcount of the HAS members planning to attend. Please RSVP via email to Amelia Goldberg by January 16th.
- Kirk also announced the planned changing of the combination to the HAS observatory site planned for March 15th. In order to receive the new combination, members must have completed the observatory site training (offered at 7 p.m. prior to each general meeting) and be current on their dues. The new combination will be distributed at the February and March HAS General Meetings followed by a mailing to those qualified members not attending either of those meetings.
- Steve Sartor announced we are selling \$5 raffle tickets for a Meade 90mm ETX EC donated by Jack Cotter.
- Steve Sartor explained that a "Sustaining Member" in HAS is one who opts to additionally support HAS by paying dues at the \$50/yr level rather than the regular level of \$36. He encouraged all members who can afford it to consider becoming a sustaining member.
- Steve Sartor welcomed back George Stradley who received a standing ovation from the membership. George continues to rehabilitate his hip and is planning to attend the picnic in January, a star party in March and TSP in May.
- Steve Sartor thanked Bram Weisman who produced the new 50th anniversary nametags being distributed to all members current on their dues.
- Amelia Goldberg recognized George Stradley, 89 years young, with his Messier Certificate #2259, his Binocular Messier Cer-

tificate #699 and his Astronomical League pins for those programs. In addition to observing all of the Messiers, George sketched each object, quite an undertaking.

- Steve Sartor presented Mike Dye with a plaque in appreciation for all of the hard work Mike has done over his 16 years as Observatory Chair. After receiving a standing ovation from the membership, Mike related that he is actually going to start observing now and get his own Messiers.
- Judy Dye distributed 2006 Observer's Guide books ordered through HAS Logo Sales and she stated she's taking names for another order.
- Judy also related that the HAS Banquet has been scheduled for March 11th. The Speaker will be Dr. Peter Shultz of Brown University, Co-investigator on NASA/JPL's Deep Impact Mission. Judy promised more details as they become available.
- HAS Member, Tony Settles sang his astronomical version of the 12 Days of Christmas, a treat for all in attendance.
- Don Pierce gave the Comet Report highlighting the newly discovered C/2006 A1 Pojmanski, which could become a binocular object by late February. Unfortunately for us, it will be better placed for southern hemisphere observers. Don also reported on C/2005 E2 McNaught, which may reach 9th magnitude by the end of February in Pisces and 73P/Schwassmann-Wachmann, which could reach naked eye brightness around May 12 as it makes a very close pass to earth on its periodic journey through our solar system.
- Don also reported on a thin moon observation he and Bill Flanagan made at TSP last year. He showed an image they took, which to his knowledge is the thinnest moon ever imaged.

*continued on Page 10...*

### General Membership Meeting

The Houston Astronomical Society holds its regular monthly General Membership Meeting on the first Friday of each month, unless rescheduled due to a holiday. Meetings are in Room 117 of the Science and Research Building at the University of Houston. A Novice Presentation begins at 7:00 p.m.. The short business meeting and featured speaker are scheduled at 8:00 p.m. Also typically included are Committee Reports, Special Interest Group Reports, current activity announcements, hardware reviews, an astrophotography slide show by members and other items of interest. Parking is NOW across from Entrance 14, by the stadium.

### Board of Directors Meeting

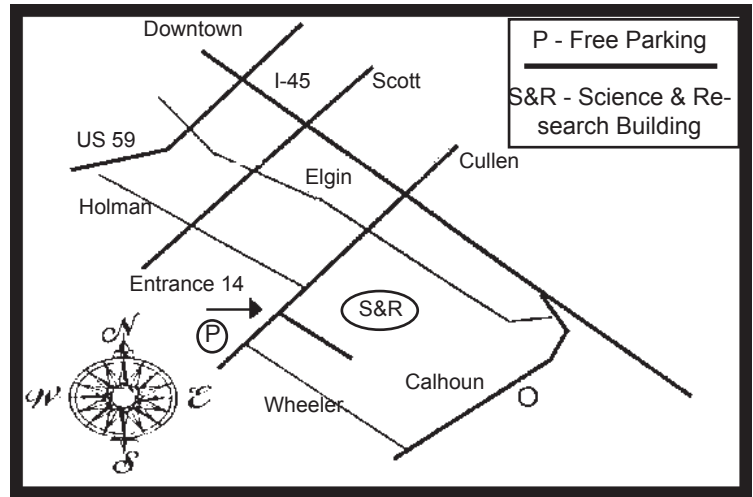
The Board of Directors Meeting is held on dates scheduled by the board at 7:00 p.m. at the University of St. Thomas. Information provided to GuideStar will be published. The meetings are open to all members of the Society in good standing. Attendance is encouraged.

### GuideStar Information

The H.A.S. *GuideStar* is published monthly by the Houston Astronomical Society. All opinions expressed herein are those of the contributor and not necessarily of Houston Astronomical Society. The monthly Meeting Notice is included herein. *GuideStar* is available on the HAS web site to all members of H.A.S., and to persons interested in the organization's activities. Contributions to *GuideStar* by members are encouraged. Electronic submission is helpful. Submit the article in text, MS-Word format via email [BillPellerin@sbcglobal.net](mailto:BillPellerin@sbcglobal.net). Copy must be received by the 15th of the month for inclusion in the issue to be available near the end of the same month. Or, bring copy to the General Membership Meeting and give it to the Editor, or phone to make special arrangements.

Editing & Production: Bill Pellerin, 713-880-8061; FAX: 713-880-8850;  
Email: [BillPellerin@sbcglobal.net](mailto:BillPellerin@sbcglobal.net)

Advertising: Advertisers may inquire concerning ad rates and availability of space.



## Houston Astronomical Society Meeting

February 3, 2006

7:00 Novice & Site Orientation

8:00 General Meeting

University of Houston

### Houston Astronomical Society

P.O. Box 20332 • Houston, TX 77225-0332



The Houston Astronomical Society welcomes you to our organization. The HAS is a group of dedicated amateur astronomers, most of whom are observers, but some are armchair astronomers. The benefits of membership are:

- Access to our 18 acre observing site west of Houston -- a great place to observe the universe!
- A telescope loaner program -- borrow a HAS telescope and try observing for yourself!
- A monthly novice meeting, site orientation meeting, and general meeting with speakers of interest.
- Opportunities to participate in programs that promote astronomy to the general public (such as Star Parties at schools)
- A yearly banquet with a special guest
- A yearly all-clubs meeting for Houston area organizations
- Meet other amateurs and share experiences, learn techniques, and swap stories

**You're invited to attend our next meeting.  
You'll have a great time.**