



GuideStar

September, 2008

At the September 5 meeting...

What Am I Looking At?

A brief overview of the physical nature of that little fuzzball plus how you can make scientifically useful observations

Brian Cudnik

Astronomy as a hobby is an intellectual exercise and an observational exercise. The more you know about an object that you see through the eyepiece, the more you appreciate your ability to see the object. This month, Brian will help us understand what we're looking at and why it's important. This subject is more important than a new eyepiece for improving your observing experience!

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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.
Joe Dillinger, FBAC - 'A - Team' and Asteroid hunting at the George Obs.

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: Bill Leach.....H: 281-893-4057
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 Don Pearce.....713-432-0734
 John Missavage.....
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AuditTom Blocker

Ad-Hoc Committee Chairpersons

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 Librarian.....Peggy Gilchrist.....281-443-8773
 Logo Mds Sales.....Judy Dye281-498-1703
 Long Range Plan.....Bill Leach.....281-893-4057
 ParliamentarianKirk Kendrick281-633-8819
 Publ. Star PartyRichard Nugent713-524-1993
 Rice U. Coord.....Matt Delevoryas713-666-9428
 Schedule Obs'v'tySteve Goldberg713-721-5077
 Texas Star Pty.....Steve Goldberg713-721-5077

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
 HonoraryNone

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* and *Astronomy* magazines are available to members at a discount.

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.

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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
 CometsDon Pearce713-432-0734
 Lunar & Planetary.....John Blubaugh713-921-4275

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/cbr/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-mailbill.leach@nhmccd.edu. Web site: www.astronomyclub.org

September/October Calendar:



Photo by Scott Mitchell

Check the web site:
www.astronomyhouston.org
Webmaster: Kay McCallum
kaym@mcclibrary.net

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 kaym@mcclibrary.net.

Date Time Event

September

5	7:00 p.m.	HAS Novice Meeting, U of H
	8:00 p.m.	HAS General Meeting, U of H
7	9:04 p.m.	Moon at first quarter
10	11:00 p.m.	Mercury at greatest elongation east
12	9:00 p.m.	Venus 0.30 deg. N.N.E. of Mars
15	4:14 a.m.	Full Moon
	12 p.m. - 12 a.m.	Annual Picnic, Columbus Observing Site
22	12:05 a.m.	Moon at last quarter
	10:44 a.m.	Fall equinox
27		Prime Night, Columbus Observing Site
		Star Party, Columbus Observing Site
29	3:12 a.m.	New Moon

October

3	7:00 p.m.	HAS Novice Meeting, U of H
	4:05 a.m.	HAS General Meeting, U of H
7	11:34 p.m.	Moon at first quarter
14	3:03 p.m.	Full Moon
19	7:30 p.m.	7th Annual Houston Beaumont Regional Astronomy Meeting, Houston Community College Administrative Building
20	3 p.m. - 10 p.m.	Astronomy Day, George Observatory
21	6:56 a.m.	Moon at last quarter
		Orionid Meteors Peak
22	4:00 a.m.	Mercury at greatest elongation west
25		Prime Night, Columbus Observing Site
28	6:14 p.m.	New Moon
30	7:30 p.m.	HAS Board of Directors Meeting, Houston Chronicle Building

Send calendar events to Doug McCormick
 - skygazer10@sbcglobal.net

Publicity Suggestion Box

I welcome any suggestions that *any* member has to offer. It doesn't matter how trivial you think your idea may be. All input will be reviewed and welcomed.

Let's grow.

Please drop me a note at the following address.

itjdm0@yahoo.com

John Missavage- HAS Publicity Chair

★ ★ ★ ★ ★

GuideStar deadline

for the October

issue

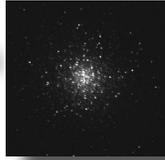
is September 15

★ ★ ★ ★ ★



Observations... of the editor

by Bill Pellerin, GuideStar Editor



Plastic cases with lids

One of the best products to come on the market in the last several years are the plastic containers with snap on lids. These boxes are great for storing astronomy stuff that you need to put in the store room or closet. These are generally available at stores around town, and you shouldn't have trouble finding them. I take several of them to the Texas Star Party. One may be filled with batteries, another with cables that I'll need and another with small accessories. I also use the zip-lock storage bags to organize things. Small parts and their associated screws don't get separated when they're put into the same zip-lock bag.

(Amateur) Astronomy in the next few years

There have been some articles in the commercial astronomy magazines about the future of astronomy, but these articles address the future of professional astronomy. What's going to happen with amateur astronomy. A few trends are rather obvious, but deserved to be mentioned.

Telescope automation will be more extensive. We now have telescopes that can figure out where they are, what time it is, and, with a minimum of set up, can point accurately to objects in the sky. What's next? Larger databases of objects will come along sooner rather than later as the cost of the memory they occupy will go down. There may be a heads-up display in the eyepiece. The idea is that the view you see through the eyepiece would be overlaid with a sky map. An arrow pointing to Pluto will be fully realized at last! This is possible with today's technology; tomorrow's technology will make it easy.

Imaging will continue to become easier. Nowadays, an imager (usually monochrome) with multiple mega-pixels and with the filters needed to produce a color image and with Adobe Photoshop software (or equivalent) requires skill, patience, and a rather significant outlay of cash.

Amateurs will still be contributing to science, but much of that effort may be the result of data mining operations. With so many imagers recording and making available sky surveys, the opportunities to use this data for 'armchair' science will multiply. Will anyone need to go to a dark site any more, when the images from a dark site can come to you? You're already seeing this kind of work going on and it'll only get more common.

International Dark Sky Approved Light

The light fixture above the gate leading to the front door of my house got broken and had to be replaced. I went to the Home Depot store nearest me and looked over the replacement fixtures. One stood out because it was designed to direct the light down with a shade over the bulb. So, I bought it. After that, I noticed that the fixture is IDA

(International Dark Sky Association) approved. (For some reason, this manufacturer and this fixture aren't listed on the IDA web site, www.darksky.org, but it may just be a matter of time.)

Anyway, if you're interested, the fixture is made by Hampton Bay and is model number 213-532. It also has a motion sensor and a photocell to turn the light off during the day and when nobody is near the light. Last night was the first night it was in place, and the light throw was just great. Light where I want it and no light where I don't.

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

..Bill

Remember --

All HAS memberships are due for renewal in January. It's not too early to pay your 2009 dues!! Our membership year corresponds to the calendar year.

If you've missed a dues payment in the past, there's no extra cost for late payment, and the organization appreciates your support.

Mail your dues to the address on the last page of this GuideStar or bring your payment to the meeting.

Observatory Corner

By Bob Rogers, Observatory Chairman



Hello everyone.

The last time that I wrote my article for the *GuideStar* was in April. After that, things went drastically downhill for me. I ended up spending about six and a half weeks in the hospital undergoing five surgeries and I still have two more to go. I am glad to report that I'm on the upside of things and that my strength is slowly coming back. The doctors have told me that my rehab may take over a year to complete. I'm also glad to report that with the diabetes, the doctors were able to save my left foot even though it is still numb, but in time the feeling should come back. Let's hope so. I want to thank everyone in HAS for your thoughts and prayers during the bad times that I was going through, It meant a lot for my wife and me. I especially want to thank Steve Goldberg for taking over the Observatory duties during my absence and keeping everyone informed of my progress.

On a personal note here, I would like to ask everyone in HAS to keep George Stradley in your thoughts as him and his family are going thru some tough times right now. I have known George for a few years now and I can tell you through my association with him that HAS is very privileged to have him as a member as I have been very privileged to have him as my friend.

An update on the Tractor Shed – The contractor that was hired to do the job came out and built the concrete form and poured the concrete as promised. The new Tractor Shed is due to be installed on August 25th. I hope to have pictures of all this to share with everyone.

An update on the C-14 project – Allen Gilchrist, Chuck Shaw and a few others on the Observatory Committee were at the site on Saturday July 26 to install the new upgrade to the C-14. We have installed a new Air



Chuck Shaw working on the C-14

Conditioner in the Telescope room due to the old unit that has quit working after 20 years. I would like to thank Allen Gilchrist, Chuck Shaw, Amelia and Steve Goldberg, Ed Fraini, Dale Morningstar, Peyton Barnes, Mike Edstrom and Don Selle for coming out and helping with these

two projects. I hope that I didn't leave anybody out.



The Supervisor at work

If you have a Randalls card, and have not done so, please have it coded for the Houston Astronomical Society. Our number is #6618. The Society gets 1 percent of the gross sales that members spend at Randalls. Randalls totals up the amount spent each quarter and will send you a check if the amount goes over \$2,500.00, otherwise the total rolls over to the next quarter or zeros out at the end of the calendar year. So please link your Randalls card to the Houston Astronomical Society so that the society can benefit from this Randalls program. Our number is #6618. This is very easy to do, just go to the Courtesy Booth and tell the person there what you want to do.

Some dates of interest here for everyone. Ken Miller/ George Stradley, our Field

Continued on page 8 ...



Don Pearce - Captain Comet

It's a privilege for me to be able to interview Don Pearce, a past HAS president here for this months GuideStar. As you already know, he is most always referred to as "Captain Comet" during our meetings and out on the observing field. Don has a passion for comet hunting, deep sky observing, and hour-old thin moon crescents.

When I was the clubs "telescope loaner chair", Don was president at the time and it was always a pleasure to work for him. He's very easy going, and he's got the knack to keep you smiling. He makes astronomy fun!

As we read about Don in the next page or two, let's not forget about his passion for the night sky. It's this enthusiasm that's so contagious... and it really shows.

The Don Pearce bio:

I was born in St. Louis, Missouri, and even at an early age I developed an interest in the sky. I remember my family showing me a total lunar eclipse when I was about 7 years old, but I particularly remember my father telling the story of "HAYLEES Comet", and its spectacular return of 1910. At the time, Comet Halley was about at aphelion, and I remember, when I first learned of its 1986 return date, that it seemed to be a lifetime away. In the meantime my family moved to Texas, and my sister gave me a book in the mid-1950s entitled "The Story of Man and the Stars" by Patrick Moore, and that book really fueled my interest in astronomy. By age 15 my father bought me a "silvered cardboard Edmund Scientific 3-inch reflector telescope." I remember being enthralled by seeing the crescent Venus and the rings of Saturn and Jupiter's moons. Later, I acquired an 8-inch Criterion "Dynascope", but living in East Texas (Tyler) I was hampered by not having any peers with an equal interest in astronomy, and for a number of years I lost interest in visual astronomy.

In 1976 I moved to Houston, but at this time I was about as far away from any astronomical interests as I had ever been. Then in either late 1982 or early 1983 I remember reading of the first recovery of Comet Halley preceding its 1986 return by the 200-inch Hale Telescope on Mt. Palomar, and, again my interest was refueled, this time, in a big way.

I first acquired a 13-inch Coulter Dob, the first of 5 telescopes I would acquire during the 1980s, and then I discovered the Houston Astronomical Society, which I quickly joined and have been active with, in one form or another, ever since. During the 24 years I have been a member, I have held offices and been active with almost every committee except Observatory Chair, including being Vice-President 1996-97 and President for three



years from 1998 through 2000. In addition, in 1984, I was one of four amateur astronomers who formed the Ft. Bend Astronomy Club, and in 1987 I served as President of that club. Sometime during the late 1980s I decided that the study and observing of comets would become my main interest, perhaps by my interest in the return of Halley, which also led me to go to Chile in 1986 to observe it with my wife, Ann Nette. Also, during the 1980s I acquired a 17.5-inch dob, and in 1985 the author of the book that started my interest in the 1950s, Patrick Moore, came to the Columbus Site and observed Halley with my 17.5-inch scope, and later wrote a nice inscription in that same original book, commemorating the event.

I have also been a long time chair of the Comet Special Interest Group which has led to me giving a "Comet

Continued ...

Just Looking... from previous page

Report" at virtually every HAS and now, even, North Houston Astronomy Club meetings, of which I am also a member.

There are other areas of astronomy that I have been intensely interested in including the somewhat obscure "art" of acquiring thin crescent moons, which eventually led me to acquire the binocular record for the minimum elapsed time for observing Opposing Crescents, a last old crescent and first new crescent moon (35 hours 14 minutes). In 1989 I thought I acquired the 'world record' for the youngest new crescent moon (13 hrs. 47 minutes), but I was bested that very night by an observer in Michigan. (13hrs. 28 minutes). Since then, that record has been broken several times. I should also mention that Kenneth Drake has been my longtime compadre in both observing thin crescents and comets. In fact, one of the many real benefits of joining clubs is the lifetime friendships that I have acquired over the years, something I would never have dreamed about when I first joined. Other areas of interest include planetary astronomy, particularly Mars, variable stars, supernovae, and in more recent times cosmology, particularly the so-called "redshift controversy".

The Don Pearce interview:

Clayton: Don, thanks for stopping what you're doing in this busy old world to take the time for this interview. So it was your Dad who first sparked your interest in comets, but why do you think it became such a life passion for you?

Don: Clayton, well, that's a hard question to answer, but I think I have always had an interest in the age old questions of who am I, where did I come from, and where am I going. I think the study of astronomy is part of that greater quest. I am always amazed at how few people are really interested in the night-time sky, because I remember that even when very young, I was curious about the stars and the Moon. As for comets, my real interest only started with the news of Halley's return.

Clayton: Tell us about observing those thin crescent slivers of the moon. How did that enthusiasm come about for you?

Don: It all started when Bradley Schaefer set up a challenge to acquire the first crescent in July of 1988. Barbara Wilson alerted Walt Frerck, and myself and we went to Rice Stadium and acquired the 27-hour-old crescent Moon. I think my own interest was further fueled by an almost spiritual reverence for the Moon, (even though it was at times an unwelcome annoyance).

Clayton: Looking back on your reign as club president during 1998-2000, what one accomplishment are you most proud of?

Don: Actually, not due to anything I did, we grew considerably during 1998-99, primarily due to our, at that time, new Internet exposure. I would like to think that while I was president, we maintained an upbeat atmosphere, and I liked to be sure that our various volunteers were given appropriate credit.

Clayton: Are you a visual observer only? Tell us about one of your typical observing sessions.

Don: Up until a few years ago, I was strictly a visual observer, but since acquiring a digital camera, I have been looking for ways to do some imaging. A typical observing session for me would often consist of observing as many comets as possible, really doing some work on a few of them, such as magnitude estimates, coma diameter sizes, etc. combined with some "gee whiz" astronomy.

Clayton: Where is most of your observing performed?

Don: The honest answer to that is my light-polluted backyard in Bellaire, but in the last few years I have observed from the Columbus Site, Ft. Griffin State Park, TSP, the NHAC Site, and several ad hoc sites for acquiring thin moons.

Clayton: Are any of your family or neighbors interested in your hobby? Do they observe too?

Don: Not really.

Clayton: *Sky and Telescope* or *Astronomy*? Why?

Don: I subscribe to both, each has their strengths and weaknesses, and I think their overall philosophies have changed over the years. In truth, I enjoy both magazines.

Clayton: Do you have an amateur observing mentor?

Don: I have a number of observing peers (like the aforementioned Kenneth Drake), all whom have had a positive influence on my observing, but when I think of the early years, the two names that come to mind as mentors were Lee Cain and Matt Delevoryas.

Clayton: Have you a favorite star party that you attend regularly? Are there others?

Don: Well, I go to TSP when I can get away,

Continued ...

Just Looking... from previous page

like in 2007, but I almost always go to an annual Ft. Griffin trip.

Clayton: Because of the graying (hair that is) in astronomy societies across the country, do you have any suggestions of how we could get more folks interested in astronomy, particularly children?

Don: That's a difficult question, but the longer I am around the more I think it is a hobby of attraction rather than promotion.

Clayton: Do you have any helpful advice to pass on to observers just starting out in astronomy, particularly comet hunting?

Don: I am really an observer of comets, and only hunted for comets during a short period during 1988-89. I found hunting for comets a really tedious experience. However, for someone so inclined I would recommend consulting either Don Machholz or David Levy. Both have written books on the subject. On the other hand, I really enjoy the study and observing of comets, and would be willing to assist anyone in that endeavor. As far, as starting out in astronomy, my major recommendation would be to enjoy the hobby, and try to stay away from all the ego trips.

Clayton: Is there an email address that you have that a society member could contact you for an additional question or two?

Don: Yes, dpearce2@comcast.net

Clayton: Thanks Don for taking the time to share your interest and thoughts with us for our monthly newsletter, *The GuideStar*. We wish you luck with all of your astronomy pursuits. Thanks too, for all the comet data that you share with the club during your "comet report" each month. Clear skies, always.

Observatory Corner... from page 5

Trip and Observing Chairmans, has set the following 2008 Field Trip Schedule –

- August 23rd for a Novice Party
- September 27th for the All Clubs Field Trip /HAS Picnic
- October 25th for a HAS General Membership – Ken Miller's Ranch.

Keep an eye out on the Web site and here at the Observatory Corner for future updates for these Field Trips.

If you have any suggestions or thoughts for the site, let me know.

Thanks,

Bob Rogers
Observatory Chairman
281-460-1573
siteworkerbob@hotmail.com

Want Ads

For Sale: Takahashi NJP Temma Mount

The mount is in excellent condition and comes with auto guider cable, custom made heavy duty Scope Guard case, power supply in Pelican case, four 14 lb weights, hand controller, polar finder illuminator, PC cable, Losmandy saddle plate and software. I am asking \$4,500. Contact Mike Squicciarini, Richmond, Texas 281-277-1885 (home), msquic@alltel.net.

For Sale: Nexstar 5se

Nexstar 5se bought in June 07. Like new condition, barely used (bought a bigger scope): This is a great starter scope if you're new to the hobby!

Includes a Zhumell 1.25 Inch Eyepiece and Filter Kit and A/C power source. Still have all the original boxes. Asking \$550.00

Rick Hillier
Call 713-875-6463 (cell)
e-mail hillier_rick@yahoo.com

For Sale: Celestron C-5 Outfit

Includes:

- 5x24 finder scope
- Erect image diagonal
- Four Eyepieces: 25 mm; 17 mm; 12.5 mm; and 7.5 mm
- Equatorial wedge, adjustable for latitude
- Battery powered (9v) motor drive
- Celestron Rubber Covered Tripod--very sturdy
- Carrying case-Celestron

Condition excellent. Price: \$425 for complete outfit. For more information or to make offer, contact Tom Williams, 713-526-2868.

For Sale: 17.5" Newtonian

Perfect for imaging or visual star parties. 17.5" f4.5 Newtonian telescope with highly accurate microprocessor-controlled, step-based alt-az drive system with focal plane rotator. Designed and built by Andy Saulietis and the owner. Accepts ST4-compatible inputs for autoguiding. Mechanical and calibration work done by the owner to optimize system accuracy for autoguided CCD imaging. Original 1981 Coulter mirror refigured to smooth 1/8th-wave surface by Sky Optical in late 80's. Primary and secondary recoated with enhanced coatings group by PAP in early 90's. Optics in excellent condition. 80mm f5 finder. Breaks down to numerous major pieces for transport. With modest effort, can be a traveling scope, but better as a semi-permanent observatory. See my website for many images made with this system over the last decade.

Price negotiable. For pickup/delivery, maybe can meet you halfway. Call 281-482-5190 or E-mail Al Kelly.

For Sale: Celestron Nexstar 8

Like New Condition...Celestron Nexstar 8, Used only 2 times in back yard. Some extras include Solar filter, 1 1/4" star diagonal, 40 mm multi-coated nexstar plossel, 8-24 mm Z00 eyepiece, variable polarizing filter, 2X multicoated Barlow. \$ 850.00 Jack DeNina, Willis, Texas 936-856-0704, jjack9485@cs.com

Email your ads to Kay McCallum, our Webmaster, at KayM@MccLibrary.net and to Bill Pellerin, GuideStar editor at billpellerin@sbcglobal.net

How can I learn more about the Astronomical League?

Amateur astronomers from across the country benefit from perusing the many pages of the Astronomical League's website, www.astroleague.org. Naturally, this is the place to go if you're looking for information about upcoming events and League news. But there is so much more...

Want to learn all about one of the great League observing programs? Go to www.astroleague.org/observing.html.

Do you know of a worthy candidate for one of the many League awards? Look at <http://www.astroleague.org/al/awards/awards.html>.

Are you interested in buying a particular book about our fascinating hobby? Then go to www.astroleague.org/al/bookserv/bookserv.html.

There is even something to help your club function better. Try www.astroleague.org/al/socaid/socaidid.html

Make the most of your Astronomical League membership! **To find out more about what the Astronomical League offers you, why not log on to www.astroleague.org today?**

Cygnus X-1 / HD226868

by Bill Pellerin, GuideStar Editor

Object: Cygnus X-1 / HD226868
Class: Black hole / Companion star
Magnitude: not vis / 8.8
R.A.: 19 h, 58 m, 21.68 s
Dec: 35 degrees, 12 minutes, 6 seconds
Distance: 8000 ly
Constellation: Cygnus
Size: n/a
Optics needed: Small telescope to show companion star

Why this object is interesting.

Cygnus X-1 is now recognized to be a black hole, but this wasn't always the case. The location was identified as a X-ray source over 30 years ago, but it took some additional time and research to convince everyone, or most everyone that the site really represents the location for a black hole.

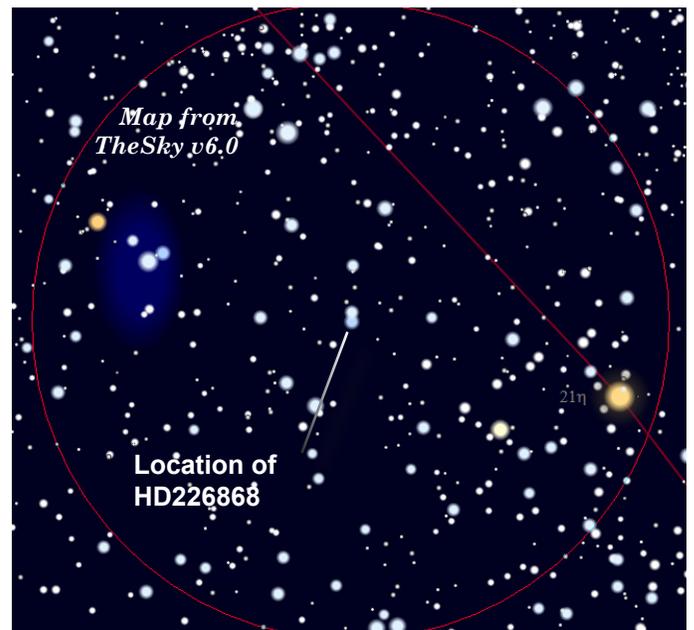
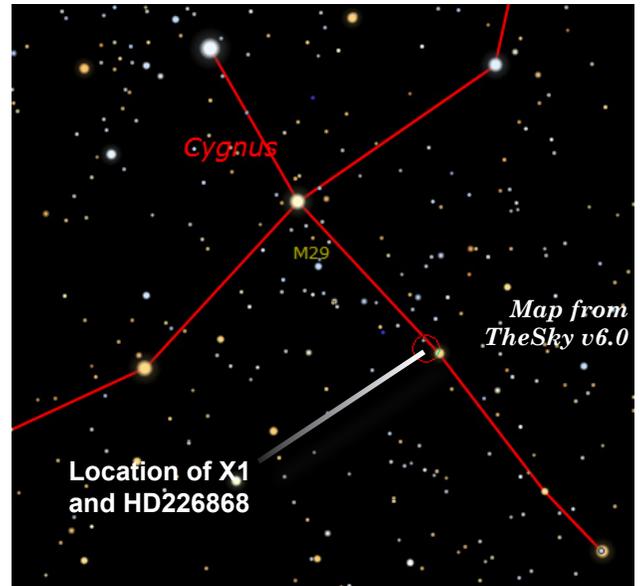
A black hole is considered exotic, and is often the subject of science fiction stories, but it's rather simple in many ways. A black hole is simply a collapsed star with an escape velocity greater than the speed of light. The escape velocity is the speed at which something must travel to escape the gravitational pull of the object. For the Earth, the escape velocity is about 7 miles / second, but for a black hole the escape velocity has to exceed 186,000 miles / second.

So, light can't escape from a black hole, and neither can anything else.

Cygnus X-1 is a black hole because other possibilities are ruled out. It has a companion star (a double-'star', if you will) called HD226868 which is about 30 solar masses in size. The density of the companion star is so high that it doesn't qualify as a neutron star or a white dwarf, so it must be a black hole.

X-1 and HD226868 orbit their common center of mass and material from the star is pulled off the star to form an accretion disk around the black hole. The X-ray radiation emanates from this accretion disk. As the gas spirals into the black hole it is no longer able to radiate in X-rays or at any other wavelength.

You can see HD226868 rather easily, since it shines at magnitude 8.8. It isn't a very bright star, but it should be visible easily in a small telescope. This is a busy part of the sky, though, and you may have to look for a while before you're convinced you're looking at the right star.



The circle in both images represents a 1 degree field of view



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Calling all Star Party Fans!

Friends of West U Parks is holding a "Fathers and Flashlights" event on Saturday, October 4. They are expecting about 250 dads with 350 children aged 4 through 9 for an evening of food, entertainment and games at the West University Little League Fields, and they have asked HAS to join the festivities and set up a "star gazing station" for the kids. If you are interested in participating please let me know.

Alan Rossiter, 713-660-9503; alan@rossiters.org

Minutes
of the August, 2008 Meeting of the

Houston Astronomical Society

The August, 2008 meeting of the Houston Astronomical Society was called to order on August 1st at 8:00 p.m. by HAS President, Bill Leach.

Opening Announcements:

- Bill Leach introduced himself and welcomed everyone, including two new members and five guests, to the meeting.

Announcements:

- HAS Vice President Ken Miller announced that he was helping George Stradley with the Field Trip/Star Party Chair duties as George deals with health issues. Ken reminded everyone that the next outing was a Novice Star Party at the Columbus site on August 23rd. Ken said he would post a message on the HAS List Server, and he asked those planning to attend to reply to him so he has a good count.
- Ken related that George Stradley has been diagnosed with lung cancer. Ken said George was in the Houston Northwest Medical center and enjoying the phone calls and visits from the membership. Ken asked visitors to keep their visits to 10 minutes as George gets tired if people stay too long. Ken asked everyone to keep George in their thoughts and prayers.
- Bill Leach announced that the HAS Banquet, held on July 12th at the Hilton Houston Southwest, was a great success. The speaker, Nobel Prize winning physicist Dr. Steven Weinberg, was enjoyed by the sell-out crowd in attendance. The membership thanked Banquet Chair Judy Dye for her work, and Judy thanked all who attended or helped with the banquet this year.
- Allen Gilchrist announced that the new control system is installed and working on the C-14 at the Columbus site. Allen has produced summary instructions for using the new system, and there is an extensive manual. Training on the new C-14 control system will be available for observatory Key Holders that feel they need it.
- Bill Leach reminded everyone that Astronomy Day is on October 18th this year, and we'll be recruiting volunteers soon. The Regional Clubs Meeting is the night before, October 17th, and the speaker will be noted comet discoverer and author, David Levy.
- Bill announced that HAS and five other local organizations that co-sponsor the local Astronomy Day activities have been recognized by *Sky and Telescope* (S&T) Magazine as the First Place winners in S&T's 2007 contest for the best Astronomy Day. The group will receive a plaque that will be displayed at the George Observatory, and each club will receive a certificate. The plaque and certificates will be awarded at the Annual Regional Clubs meeting on October 17th. Congratulations to Bill and all of the volunteers who worked so diligently to make the 2007 Astronomy Day a rousing success.
- Amelia Goldberg presented Brian Cudnick with the Astronomical League's Lunar Club Certificate #607 and a Lunar Club pin in recognition of Brian's completion of the AL's Lunar Club observing program. To see all the awards earned by HAS members, visit the Astronomical League Certificates page of the HAS website, www.astronomyhouston.org For more information on the Astronomical League observing programs, go to the AL website, <http://www.astroleague.org/>
- Telescope Loaner Program Co-Chair, Bram Weisman, reviewed the details of the Loaner Telescope Program and pointed members to the HAS website for more information. Bram also displayed a new addition to the program, a Celestron NexStar 6 SE go to Schmidt-Cassagrain telescope, purchased with the proceeds from the sale of several of the older loaner telescopes that were not seeing much usage. If the NexStar 6 sees the amount of usage expected, Bram will limit loan out of this to one month instead of the usual two.
- Bram also related the story of his selling the 10" Cave Astrola telescope, donated to the HAS loaner scope program last year, back to its original owner, Michael Holland. It was an interesting story as the Michael recognized the scope from modifications he made to the mount over 30 years ago.

Continued on page 13...

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

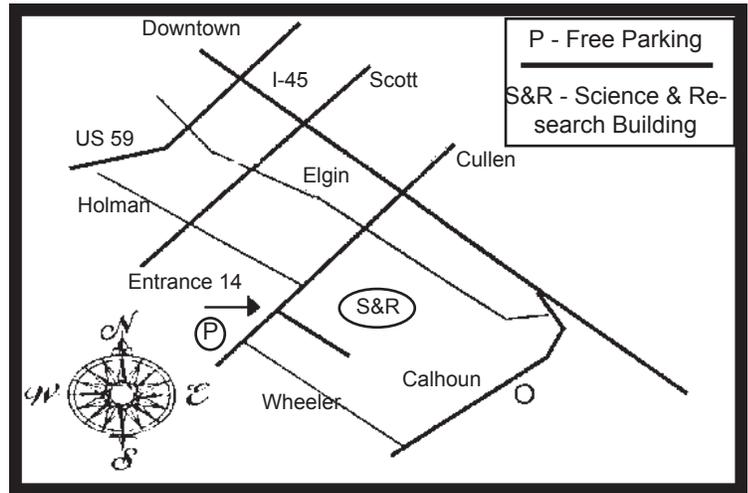
The Board of Directors Meeting is held on dates scheduled by the board at 7:00 p.m. at the University of St. Thomas. Information provided to GuideStar will be published. The meetings are open to all members of the Society in good standing. Attendance is encouraged.

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. 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.

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Houston Astronomical Society Meeting Meeting on September 5

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.***