



July, 1998

At the July 10 meeting...

NOTE Meeting date is second Friday this month

El Niño, La Niña and their effects on Astronomical Viewing

Marshall Wickman, Meteorologist

Houston Astronomical Society

GuideStar

Starline - 281-568-9340

Houston Astronomical Society presents *Starline* -- a recorded message of Society events and astronomical happenings. This service is updated regularly, so call often to keep up-to-date on Society functions, new comets and more.

H.A.S. Web Page: <http://spacsun.rice.edu/~has>

Schedule Changes & Up-To-Date Information

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

Observatory Site Telephone: 409-732-8967

★★★★★ *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 and past president ★★★★★

President: Don Pearce H: 713-432-0734	Treasurer: Bill Flanagan H: (713) 699-8819
Vice Pres: Kirk Kendrick H: 281-391-3834	Past-President: Allen Gilchrist H: 281-558-1190
Secretary: Matt Delevoryas H: 713-795-0808	

★★★★★ Additional Board Members ★★★★★

	Liaison responsibility
John Blubaugh 713-921-4275	Publicity, telescope
Jay Levy 281-992-2708	Program, Field Trip/Observing
Warren Wundt 713-697-2960	Audit, Program, Field Trip/Observing
Tom Fox 281-358-5419	Education, Welcoming

★★★★★ Committee Chairpersons ★★★★★

Audit Mike Gumler 409-938-4793	Program John Chauvin 713-981-8281
Education James Benthall 713-669-0838	Publicity Marg Nunez 713-529-2549
Field Tr./Obsg. Kenneth Drake 281-367-1592	Telescope Clayton Jeter 281-383-1337
Novice Mitchell/Goldberg 713-461-3020	Welcoming Susan Spore 281-493-2614
Observatory Michael Dye 281-498-1703	

★★★★★ Ad-Hoc Committee Chairpersons ★★★★★

Historian Leland Dolan 713-529-0403	Publ. Star Party Marg Nunez 713-529-2549
Librarian Peggy Gilchrist 281-558-1190	Rice U. Coord. Matt Delevoryas 713-795-0808
Logo Mds Sales Judy Dye 281-498-1703	Schedule Obs'v'ty Steve Goldberg 713-721-5077
Long Range Plan Don Pearce 713-432-0734	Texas Star Pty Steve Goldberg 713-721-5077
Parliamentarian Kirk Kendrick 281-391-3834	

★★★★★ 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.

★★★★★ Dues and Membership Information ★★★★★

Annual Dues: Regular \$33.00	Student \$5.00
Associate \$5.00	Honorary None
Sustaining . \$50.00	

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 \$27/year, *Astronomy* mag \$24/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.

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Call the Starline, 281-568-9340 for updates and changes

Welcome to New Members!

The Houston Astronomical Society encourages you to join our group of active amateur astronomers and take advantage of the benefits of membership. As a member you'll have access to the club observing site near Columbus, Texas. (You're required to participate in a site orientation meeting before you get the gate lock combination.) The site has concrete pads for setting up your telescope, restroom and bunkhouse facilities, and areas set aside for camping. No new members this month.

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 Flanagan	713-699-8819
CCD	Tom Arnold	281-495-0142
Comets	Kenneth Drake	281-367-1592
Lunar & Planetary	John Blubaugh	713-921-4275
Occultations & Grazes ...	Wayne Hutchison	713-827-0828

The President's Message



This month I have just a brief message.

I would like to encourage all of our members to get out and do astronomy. Observe. Do CCD imaging or astrophotography. It appears that the smoke and haze from Southern Mexico and Central America has abated. It is a good time to go out to the site and enjoy the dark summer nights.

If you are new, go through our site orientation and receive the gate-lock combination. Incidentally, for those who qualify, remember that there is a new gate combination effective July 1st. Also remember to observe the light rules.

The summer nights offer countless magnificent objects to observe in and around the Milky Way.

Just do it.

Clear skies and le croissant lunaire

Don Pearce

Houston Astronomical Society

Meeting Notice

For Friday, July 10, 1998

***Note: Meeting moved to July 10 to avoid
conflict with July 4 Holiday***

El Niño, La Niña and Their Effects on Astronomical Viewing

*Marshall Wickman, Meteorologist with Wilkins
Weather Technologies will talk to us about how
we've been effected by current weather patterns.
Think the number of clear nights this year has been
low? Find out what's ahead in this informative
presentation.*

Schedule of meeting activities:

Novice meeting: 7:00 p.m.

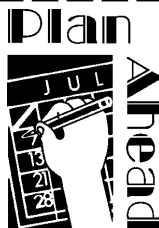
**Everyone's welcome at the Novice meeting... even veterans. Scott
and Amelia have something to offer every observer. Be there!**

Site orientation meeting: 7:00 p.m.

General meeting: 8:00 p.m.

See the inside back cover for more information.

July Calendar:



<i>Date</i>	<i>Time</i>	<i>Event</i>
1	1:41 p.m.	First Quarter Moon
3	7:00 p.m.	Earth at aphelion-farthest from the sun
9	11:02 a.m.	Full Moon
10		HAS Club Meeting
	7:00 p.m.	Novice Presentation - U of H
	8:00 p.m.	General Membership Meeting - U of H
14	7:00 p.m.	Advanced SIG Mtg.-Rice Univ., contact Bill Flanagan, 713-699-8819
16	10:14 a.m.	Last Quarter Moon
18		Members Observatory Night
23	8:44 a.m.	New Moon
25		Prime Night
31	7:04 a.m.	First Quarter Moon
7 August		HAS Club Meeting
	7:00 p.m.	Novice Presentation - U of H
	8:00 p.m.	General Membership Meeting - U of H

Send calendar events to JBlubaugh@aol.com or call 713-921-4275.

HAS Web Page

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

The address is: <http://spacsun.rice.edu/~has>

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 goldberg@sccsi.com. (You can click on my name on the HAS home page). Or, you can call me, Steve Goldberg (WebMaster), at 713-721-5077.

HAS Logo Sales

by Judy Ann Dye

Come to the meeting and pick up one of the following items, or call Judy Dye to place your order.

White sweatshirt with blue stars	\$ 13.00
Grey hooded sweatshirt (M to XL)	\$ 25.00
Grey hooded sweatshirt (XXL)	\$ 27.00
Blue satin jacket w/logo only	\$ 36.00
*Blue satin jacket w/logo and name	\$ 40.50
Observer's Guide -- Essential guidebook to 1998 astronomical events.	\$12.00

Other Meetings...

Brazosport Astronomy Society meets at 7:00 p.m. on the 2nd Thursday of each month in the Planetarium of the fine Arts Center at Brazosport College. Call Steve Lamb for program details (409) 297-3984

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

Johnson Space Center Astronomical Society meets in the the Lunar and Planetary Institute on the 2nd Friday of each month.

Update to May's Open Letter On GuideStar

By John Blubaugh, Board Member

Since my open letter appeared in the May *GuideStar*, the search continues for members willing to help assemble our newsletter. Also, article submissions by more members continue to be conspicuously absent. However, all is not doom and gloom because obvious improvements have been made to *GuideStar* by our editor, Bill Pellerin.



Recognizing that our call for help has gone largely unanswered, Mike Dye along with his wife Judy have agreed to continue assembling *GuideStar*. They are, however, in need of people willing to assist them. Time and again Mike has stepped up to the plate to bat for the Houston Astronomical Society, and this is one of those times. It is easy to take for granted the work behind the scenes that is needed every month to get *GuideStar* into the hands of members. We seem to forget that *GuideStar* does not simply “happen” by magic or royal proclamation (although it may seem that way at Board meetings). and this printed page are the result of conscious decisions by thoughtful and generous people who have chosen to make their time available for the benefit of others.

Some members now reading this have already received a phone call from a Board member or an Officer on behalf of Mike and Judy. Those who have declined or who have not yet received a call are again respectfully asked to offer a helping hand to Mike and Judy. Mike's phone number can be found on the inside cover.

The Houston Astronomical Society has over 350 active members, but it seems as if the same small group of contributors submit articles. In addition, the vast majority of current or recent contributors play other roles in the Society, as well. If just one small article was submitted per year by each of our members, there would be more than a score of new

Continued on page 11...

Observatory Corner



By Michael B. Dye Observatory Chairman



From time to time I notice the various items left behind at the Observatory Site. The latest item of interest is what looks like a fairly new Nissan Hubcap. The Hubcap is propped up against the right hand EXIT sign by the bathroom sidewalk. Would the owner please collect same and take it home.

The Bar-B-Que is open for business. On the last weekend of May Bob Rogers, Allen Rogers, Lloyd Stephens, Michael Stephens and Pat Stephens completed the setting the Bar-B-Que units into the Brick cradles. The only things left to do is to assemble and install the Grill pad cover (roof), install the shelf space and storage cabinets (weather proof). I would like to thank all those members and guests who helped on this project. Judy and I tried out the grills the second Saturday of June by cooking some hamburgers. They (the burgers) turned out well.

For those members who are interested, the new storage building is coming along very nicely. This past weekend, (second weekend in June) Richard Nugent helped me put on the gable end cap. The last weekend of May, John Norris and I completed installing the electrical wiring and installed the Air Conditioner in the West Room. When I can get door knobs and an access control system installed along with the necessary air conditioner and dehumidifier in the East room, we will start letting members use the Observatory Dob. I have not chosen a name for the scope yet, so if anyone has any ideas, contact me.

I have been informed that there seems to be some confusion about the way the bunkhouse is used. The basic rule is that first come first serve - NO SAVED BUNKS. Please do not try to stake out a bunk by putting your bed roll on it so that you can have a bunk when you quit observing at O dark 30 in the morning.

Continued...

Observatory Corner... from previous page

July 1st will be the official Observatory Site Combination change date. This means that on that date, I will go out to the Observatory Site and change all the Common Access combination locks (both gates, pump house, and electrical boxes). I have determined the new combination number and as of this date I have completed handing out the Combination Notification envelopes at the General Meetings. I mailed out the remainder of the Combination envelopes on the 16 of June. These individualized envelopes will contain the new combination and other assorted information for Members who have taken the Observatory Site orientation course.

The Second month of the 1998 Observatory Site Fund Raising Drive continues to be a success. The Observatory Committee received \$4,336.00 in cash donations from 76 members. The average donation size is \$57.05. The fund raising drive continuous and as I said before no donation is too small. If you use and enjoy the Observatory Site, please donate to the Observatory Committee so that we can continue to add improvements to the Site and the Facilities. All donations are tax deductible and receipts will be issued by January 31, 1999.

On the same subject as donations, we (the Houston Astronomical Society) now have a Randalls Card Number. Randalls will donate a percentage of our total grocery purchases to the Houston Astronomical Society as long as the member is in 'good standing' (does not owe Randalls any money). The amount of the donation is dependent on our (HAS members) purchases. Randalls will make payments on a quarterly time frame. The interesting thing is that we ended up with two numbers. After a phone call to the person in charge of this activity, the problem was resolved. We will continue using the first number issued (#6618). If you have a Randalls card, please have it coded with 6618, at the Courtesy Booth.

***Please fill out the appropriate log form
when you use the site, even if you do not observe.***

Open Letter on GuideStar... from page 8

submissions every month! As it stands, there are perhaps fewer than two submissions by previously unpublished members each year. At this rate, it would take over 200 years before each member submits an article! One hopes that there is more talent in the Society than this implies.

In my letter, a request was made that more money be spent on *GuideStar* so improvements to its format could be implemented (such as the ability to print good quality photos). The Board chose not to spend the extra money it would take to do this. However, since then, *GuideStar* editor Bill Pellerin, through the insertion of digitized photos, has done his best to prove that one can indeed get blood from a turnip. It could be argued that more digitized photographs of people have been published in the last two months than have appeared in the last two years (probably closer to ten years). This is a good thing.

Please help to make *GuideStar* the indispensable publication that it should be. Call Mike Dye or submit an article or observation for publication. It sounds simple and it is: *GuideStar* is only as good as our members make it.

Editor's Note: It has been a privilege to put together the *GuideStar* each month for our society. I view this work as an opportunity to make my contribution to the Society. The HAS, with all the benefits of membership has helped me develop my skills as an amateur astronomer and I want to do what I can to help.

Mike and Judy Dye have done much more than their fair share to support the HAS. I agree with John, it's time for someone to step up and take responsibility for making a contribution to the organization. Call Mike and Judy and volunteer.

With regard to the photos now appearing.... their appearance now is mostly coincidental. I recently acquired a digital camera and now have the ability to place electronic images in the newsletter.

.. Bill Pellerin, GuideStar Editor

Richard Nugent Presents on... Determining Stellar and Galactic Distances

by Bill Pellerin, *GuideStar* editor

Those present at the June meeting of the Houston Astronomical Society were able to hear H.A.S. member Richard Nugent's presentation on the measurement of stellar and galactic distances. Richard began by listing the various ways in which these distances can be measured, and then he went on to explain the range of measurement and the accuracy of the various methods of measurement.



Nugent takes a question during his presentation

The improvement in our ability to make these measurements has improved substantially, and will continue to improve as time goes on. The information we acquire from such studies will tell us the size, age, and ultimate fate of our universe (big crunch, static universe, or eternally expanding universe).

My favorite book on this subject is *Coming of Age in the Milky Way*, by Timothy Ferris, 1988. It is available in paperback and on audio tape.

Want Ads

For Sale: Meade 8" LX-6 premier SCT, set up for astrophotography. Includes 2" focus w/ 1 1/4" adapter, digital setting circles, JMI micro-max, flexible dew shield, Telrad, homemade rotating table/eyepiece holder/light- My Design that attaches between scope and tripod, JMI dec motor, Celestron off-axis guider, Olympus OM-1 camera w/varimagina finder, Orion skyglow filter(rear cell attach), 12mm reticle illuminated eyepiece, Tele vue 1.8x barlow, Celestron f/6.3 reducer/corrector, pointsource astrophoto focuser. All in like new condition. All for \$1700. Will sell individually if you buy the scope.

Call David Tocco @ 281 492-2990 or email: tocco@electrotex.com

Observatory Duty Roster

by Michael B. Dye, Observatory Chairman

This is the duty list for July, August and September. 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.

For July supervisor Dana Lambert 281 933-4627

Gary Ray Site
Glenn L. Ray Members Observatory Night 07-18-98
George E. E. Reder Site
Henry Schneider Site
Carl Sexton Members Observatory Night 07-18-98
Steve Simpson Site
Larry C. Wadle Site
Mark R. Watson Members Observatory Night 07-18-98

For August supervisor Logan Rimes 713 681-5397

Tom Williams Members Observatory Night 08-15-98
Barbara Wilson Members Observatory Night 08-15-98
Buster Wilson Members Observatory Night 08-15-98
Warren Wundt Site
W. Charles Barnes Site
John Blubaugh Site
Ken Carey Site
Ronald R. Carman Site

For September supervisor Logan Rimes 713 681-5397

John Chauvin Site
Art Ciampi Members Observatory Night 09-12-98
Mickey Davis Members Observatory Night 09-12-98
Kenneth Drake Site
Jean-Marc Follini Site
Fred Garcia Site
John Garza III Site
Clifton Goldman Members Observatory Night 09-12-98

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.

Forty Years of Amateur Astronomy

By Leland A. Dolan

It's hard to say exactly when I "became" an amateur astronomer. However, I would date my entrance into this hobby to that day in late spring of 1958, when I ordered a 3-inch Newtonian (costing me a grand sum of \$30) from Edmund Scientific. That scope turned out to be very unsatisfactory with its cardboard tube, sliding drawtube, a Barlow that produced a spectrum, and a mounting that kept slipping, no matter how tight the wingnut. After buying a copy of the *June Sky & Telescope*, I saw an ad for a 4-inch Newtonian priced at \$50. This time I wanted solid advice before purchasing another telescope, so I waited until I could attend a meeting of an astronomy club, which would be in July. Since the first Friday of that month was the Fourth, the meeting would be on the second Friday, as is the case this year. So it was that on July 11, 1958 I attended my first meeting of the Houston Amateur Astronomy Club (as this Society was formerly known), and "joined up." As it turned out, a couple of members owned 4-inch Criterion Newtonians, so I bought one. Optically, it was a "darn good" telescope, though the mounting was rather flimsy. And, that's how I got into this "racket."

Even as a child, I was curious about astronomy. In April 1940, the path of an annular eclipse passed right through Houston, and this seven-year-old was "greatly impressed" by the darkening afternoon sky, not to mention the odd shadows cast by a ring-shaped sun. And yet, it would be another sixteen years before I would get my first look through an astronomical telescope. In 1956, as I was leaving one of the two movie theaters that stood on Main Street, a block north of Foley's, I saw this "huge" telescope across the street. Although it was late at night, my curiosity got the better of me, and I paid 25 cents to look at the Moon through the eyepiece of a 20-inch Cassegrain. The scope was mounted on a flatbed truck and a "very-talkative" man, named Woody Myers, explained what I was looking at. As it turns out, he was president of the H.A.A.C. On several other occasions I went to look through this impressive telescope.

Continued on page 15...

Forty Years of Amateur Astronomy... *from previous page*

The International Geophysical Year (IGY) began in July of 1957. Scientists would study the interrelationship between Earth and nearby space. During the second half of 1957, two events would propel me even closer to astronomy. In August of that year I saw Comet Mrkos, which for a week or so was impressive after sunset, even without optical aid. What happened that October, the launch of Sputnik I, was “extremely disconcerting” to us Americans. However, it sure caused lots of folks to gaze skyward. To see a satellite, I had to know where to look, so I had to learn my way around the sky. In those days, I could find paperbacks on astronomy even at a local drug store.

This leads up to the where we came in, with the purchase of my first telescope. The rest is history. I now have much better equipment with which to observe, and record the skies. However, I sure miss backyard astronomy in the days when a small telescope could show various nebulae, even from the heart of Houston. Though the heavens today are tarnished by dirty air and light pollution, I derive great satisfaction from observing the Moon in all her phases. To me, amateur astronomy is an “adventure.”

Election for vacancy on Board to be held

Per the notification in the June issue of *GuideStar*, an election will be held at the July meeting to fill an open position on the Houston Astronomical Society Board of Directors.

Good Idea ? You Bet !

By Clayton L. Jeter, Telescope Loaner Chairperson

One of the more frequent questions that I get asked about astronomy is “ Just what telescope should I buy... a Newtonian reflector, Schmitt-Cassigrain, or a Classical Cassigrain, a refractor... a fork mount, a Dob, German mount or what ever ” ?

I always suggest, “ borrow, decide, then buy”. Smart idea? You bet! Let`s face it... this can be a real long- term, money saving investment idea. Where else can you borrow a astronomical telescope for two months ... Free.. and with all the whistles and bells that go with it ! You can`t go wrong.

Other questions asked... “ How do I collimate my own telescope.. clean mirrors.. how should I center-dot my primary .. or why “ ? Feel free to give me a call... bring your scope over and I`ll get you fixed up and going just for the asking. Good idea ? You bet !

See you at the meeting....

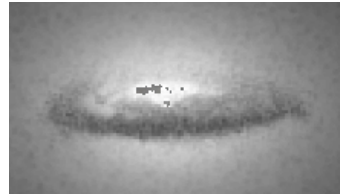
cloudless nights.. always.

Clayton - (281) 383-1337

Hubble Uncovers Dust Disk Around a Massive Black Hole

From the Space Science Telescope Institute

Resembling a gigantic hubcap in space, a 3,700 light-year-diameter dust disk encircles a 300 million solar-mass black hole in the center of the elliptical galaxy NGC 7052.



The disk, possibly a remnant of an ancient galaxy collision, will be swallowed up by the black hole in several billion years.

Because the front end of the disk eclipses more stars than the back, it appears darker. Also, because dust absorbs blue light more effectively than red light, the disk is redder than the rest of the galaxy (this same phenomenon causes the Sun to appear red when it sets in a smoggy afternoon).

This NASA Hubble Space Telescope image was taken with the Wide Field and Planetary Camera 2, in visible light. Details as small as 50 light-years across can be seen.

Hubble's Faint Object Spectrograph (replaced by the STIS spectrograph in 1997) was used to observe hydrogen and nitrogen emission lines from gas in the disk. Hubble measurements show that the disk rotates like an enormous carousel, 341,000 miles per hour (155 kilometers per second) at 186 light-years from the center.

The rotation velocity provides a direct measure of the gravitational force acting on the gas by the black hole. Though 300 million times the mass of our Sun, the black hole is still only 0.05 per cent of the total mass of the NGC 7052 galaxy. Despite its size, the disk is 100 times less massive than the black hole. Still, it contains enough raw material to make three million sun-like stars.

Continued...

Hubble Uncovers Dust Disk... from previous page

The bright spot in the center of the disk is the combined light of stars that have crowded around the black hole due to its strong gravitational pull. This stellar concentration matches theoretical models linking stellar density to a central black hole's mass.

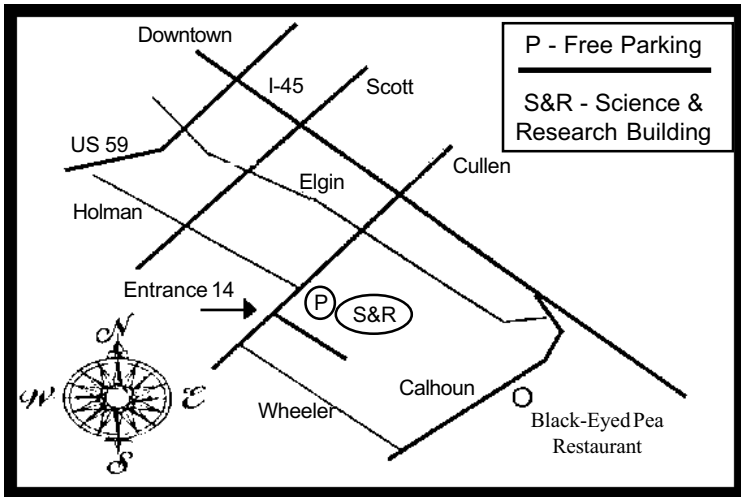
NGC 7052 is a strong source of radio emission and has two oppositely directed 'jets' emanating from the nucleus. (The jets are streams of energetic electrons moving in a strong magnetic field and unleashing radio energy).

Because the jets in NGC 7052 are not perpendicular to the disk, it may indicate that the black hole and the dust disk in NGC 7052 do not have a common origin. One possibility is that the dust was acquired from a collision with a small neighboring galaxy, after the black hole had already formed.

NGC 7052 is located in the constellation of Vulpecula, 191 million light-years from Earth.

Credit: Roeland P. van der Marel (STScI), Frank C. van den Bosch (Univ. of Washington), and NASA

**GuideStar deadline for the August issue is
July 15**



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.

Board of Directors Meeting

The Board of Directors Meeting is held on dates scheduled by the board at 7:00 p.m. in Room 106 of the Space Science Building at Rice University. Call StarLine for Board Meeting information. 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 sent via bulk rate mail to Regular, Student, and Honorary Members of H.A.S., selected individuals and recent visitors to the General Membership Meeting. Contributions to *GuideStar* by members are encouraged. Electronic submission is helpful. Submit the article in ASCII text, MS-Word (preferred), or WordPerfect format on an IBM format floppy or via AOL (BILLP10566). Mail copy to the address shown on the outside cover or to the editor at 256 East 5th Street, Houston, TX 77007. Copy must be received by the second Friday of the month for inclusion in the issue to be mailed 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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 AOL: BILLP10566; Internet: BILLP10566@AOL.COM

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