

December, 2005  
Volume 72, Issue 12  
www.iasindy.org



# The Bulletin

## **General Meeting Date has Changed!!**

**The December General Meeting, December 17, 7:00 PM Butler  
Holcomb Observatory**

**We have postponed it a week so that we can have the Fourier for  
the goodies and more room to party.**

Come one come all!!! There is no speaker and we will have our annual Christmas Party. Angie Molt is doing her thing with the catering. Come with a big appetite. Most goodies are furnished. Bring a small dessert. There will be raffles, awards, and fun.

### **HOLIDAY RAFFLE OF ASTRONOMICAL PROPORTIONS!**

At the December meeting we will raffle of the following items: Meade Deep Sky Imager with Autostar Suite (donated by Meade) Deep Sky Imager with AutoStar Suite, automatically sorts, aligns and combines the best images; extremely low noise, highly detailed color image. With Meade's Deep Sky Imager and AutoStar Suite you will be taking incredible color images of galaxies, nebulae, star clusters and planets your first night out. Retail \$299.00

StarDust Observing Chair (donated by Fritz Kleinhaus) Never slip adjustable height seat - The StarDust Chair cushioned seat has ridged steel hooks that cannot slip and drop you to the ground. The StarDust Chair seat moves only when you want it to move. Retail \$169

Barska Mini-Giant 15 X 70 Binoculars - Light weight, Long eye relief, BAK-4 prisms, Tabletop tripod, and Carrying case. Retail \$99.00

10 X 42 Waterproof, Light Weight, Roof Prism Binoculars BAK-4 roof prisms, Long eye relief, Twist in/out eyecups, Case & strap. Retail \$89.00

Free subscription (1 year/ six issues) to Sky & Telescopes Night Sky magazine Aimed at the beginning astronomer. Retail \$17.99

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\$10 per ticket, 5 tickets for \$40, 10 tickets for \$75 Tickets sold only at the meeting (checks are accepted). You must be present to win (in order to select the item you want). First ticket drawn gets first choice, and so on. Once you win you are ineligible for the remaining items. Proceeds go to the "McCloud Fund".

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### **2006 Observer's Handbooks**

The new handbooks are in. John Shepherd has them for \$18.00. They are chocked full of celestial information and are really handy.

See John if you want one.



## **Voices from the Cacophony**

By Trudy E. Bell and Dr. Tony Phillips

Around 2015, NASA and the European Space Agency plan to launch one of the biggest and most exacting space experiments ever flown: LISA, the Laser Interferometer Space Antenna.

LISA will consist of three spacecraft flying in a triangular formation behind Earth. Each spacecraft will beam a laser at the other two, continuously measuring their mutual separation. The spacecraft will be a mind-boggling 5 million kilometers apart (12 times the Earth-Moon distance) yet they will monitor their mutual separation to one *billionth* of a centimeter, smaller than an atom's diameter.

LISA's mission is to detect gravitational waves—ripples in space-time caused by the Universe's most violent events: galaxies colliding with other galaxies, supermassive black holes gobbling each other, and even echoes still ricocheting from the Big Bang that created the Universe. By studying the shape, frequency, and timing of gravitational waves, astronomers believe they can learn what's happening deep inside these acts of celestial violence.

The problem is, no one has ever directly detected gravitational waves: they're still a theoretical prediction. So no one truly knows what they "sound" like.

Furthermore, theorists expect the Universe to be booming with thousands of sources of gravitational waves. Unlike a regular telescope that can point to one part of the sky at a

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time, LISA receives gravitational waves from many directions at once. It's a cacophony. Astronomers must figure how to distinguish one signal from another. An outburst is detected! Was it caused by two neutron stars colliding *over here* or a pair of supermassive black holes tearing each other apart in colliding galaxies *over there*?

"It's a profound data-analysis problem that ground-based astronomers don't encounter," says E. Sterl Phinney, professor of theoretical physics at the California Institute of Technology in Pasadena.

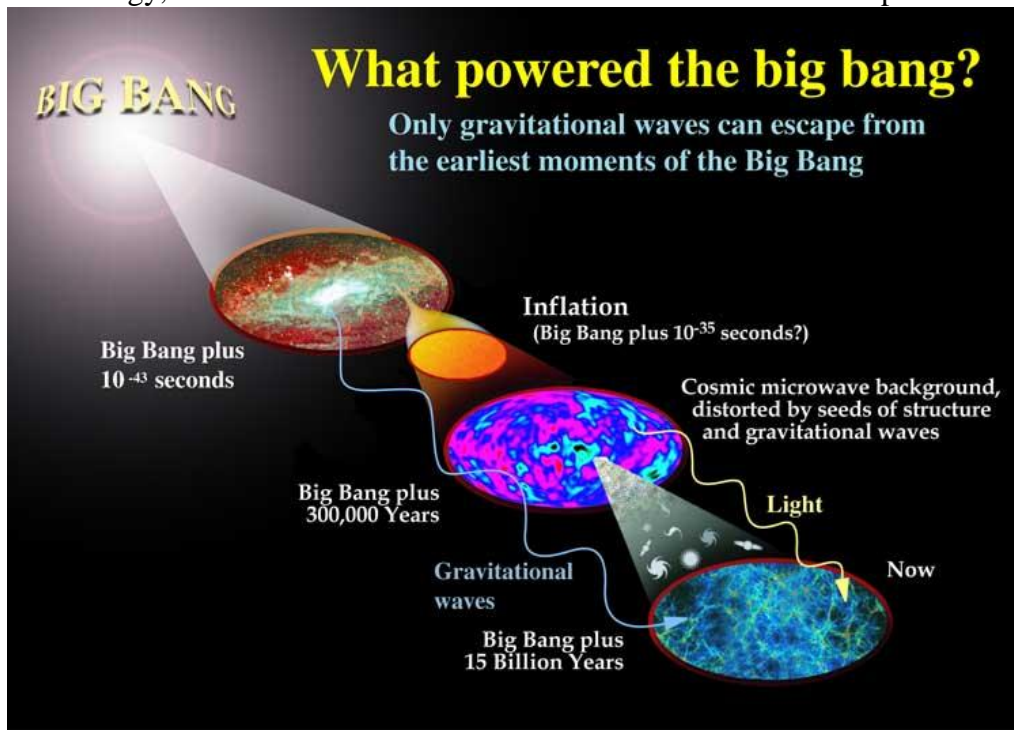
Profound, but not hopeless: "We have lots of good ideas and plans that work—in theory," he says. "The goal now is to prove that they actually work under real conditions, and to make sure we haven't forgotten something."

To that end, theorists and instrument-designers have been spending time together brainstorming, testing ideas, scrutinizing plans, figuring out how they'll pluck individual voices from the cacophony. And they're making progress on computer codes to do the job.

Says Bonny Schumaker, a member of the LISA team at the Jet Propulsion Laboratory: "It's a challenge more than a problem, and in fact, when overcome, a gift of information from the universe."

For more info about LISA, see [lisa.nasa.gov](http://lisa.nasa.gov). Kids can learn about black holes and play the new "Black Hole Rescue!" game on The Space Place Web site at <http://spaceplace.nasa.gov/en/kids/blackhole/>.

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



## **Clyde Fishburn Passes Away**



Clyde Rolland Fishburn 77, lifelong resident of Indianapolis, passed away Oct. 22, 2005 at St Vincent Hospice. He was born April 12, 1928 to the late Merdie C. and Roxie E. Fishburn. It was a sad occasion for all of us and the IAS has lost a corner stone in our history. It was touching to view him finding him dressed with a celestial tie. Quite appropriate for a man who spent his life looking at the heavens. Clyde graduated from George Washington High School, Class of 1946. He and Dean his wife had been married almost 54 years. Clyde was a brilliant, skilled, and talented man with a friendly disposition, quick wit and a wonderful sense of humor. He was a member of the Indianapolis Aero Club and an honorary lifetime member of the Indiana Astronomical Society. Clyde had been a member of the IAS for 53 years. He was an avid amateur astronomer holding every available office within the society including president. As a skilled telescope maker, he also taught telescope-making classes at the University of Indianapolis. In talking to Clyde in the past, I learned that the IAS was originally a group of individuals very interested in the design and building of telescopes. They observed but the focus was on the design and making of telescopes. I spent several evenings talking to him about his favorite project, a 20" primary mirror he had been grinding for some time. He chuckled about the time he was trying to make the mirror into a Cassegrain and while drilling the hole in the back he miscalculated and put a hole through the mirror. He had wanted to only put the hole part way through and then finish the grinding. He glued it back together and had the mirror almost done. The family has donated the mirror to the IAS and, with Dave Stevens help, our plan is to complete the project and build the Clyde Fishburn Memorial Telescope for use by the IAS. Dean (his wife) says that he spent many evenings for years in the back yard with neighbors of his south side home teaching them about the sky. In addition he conducted lectures for the IAS and for various Boy Scout troops. He was a past Cub Scout leader and enjoyed teaching the boys and sharing scouting with his son Brian. Clyde was an accomplished musician learning to play the guitar as a teenager and later he added the banjo, mandolin, violin, accordion and keyboard. He even warmed up a crowd for Tex Ritter. He was a skilled woodworker, and photographer, who also enjoyed observing nature and oil painting. We will miss him and think of him every time we gaze into the night sky, which he loved so well. His daughter recalled that while Clyde was in the hospital the last time, they rolled his bed outside and he looked up and saw and recognized the Pleiades. A bright new star now shines in the heavens. Memorial contributions may be made to either St Vincent Hospice or The Indiana Astronomical Society

*The Pres*

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## **McCloud Nature Park Project Fund**

In an effort to fund the project the IAS Board has created a "McCloud Fund". All donations to the Fund will go directly towards funding the improvement project which will include the storage building and warming room and six electrified concrete pads.

If you would like to make a cash donation to the McCloud Fund, please send it to:

John Shepherd, Treasurer  
4609 Callahan St.  
Indianapolis, IN 46239

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The IAS in a Not-For-Profit 501 C-3 corporation. Your donation may be tax deductible. Consult your tax advisor.

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## **Election Results**

At our November General meeting, the IAS held its annual general elections. The following members were elected:

**President** – Jeff Patterson

**Vice President and Program Chairman** - Brian Murphy

**Secretary** – Betsy Brown

**Treasurer** – John Shepherd

**Board of Directors** – John Molt

**Board of Directors** – Marion Hakes

Congratulations to those who were elected

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## **The Ten Commandments of the Amateur Astronomer**

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1. Thou shalt have no white light before thee, behind thee, or to the side of thee whilst sharing the night sky with thy fellow stargazers.
2. Thou shalt not love thy telescope more than thy spouse or thy children; as much as, maybe, but not more.
3. Thou shalt not covet thy neighbor's telescope, unless it exceeds in aperture or electronics twice that of thy wildest dreams.
4. Thou shalt not read "Astronomy" or "Sky & Telescope" on company time, for thine employer makes it possible to continue thine astronomical hobby.
5. Thou shalt have at least two telescopes so as to keep thy spouse interested when the same accompanies thee under the night sky or on eclipse expeditions to strange lands where exotic wild animals doth roam freely.
6. Thou shalt not allow either thy sons or thy daughters to get married during the Holy Days of Starfest.
7. Thou shalt not reveal to thy spouse the true cost of thy telescope collection; only the individual components, and that shall be done with great infrequency.
8. Thou shalt not buy thy spouse any lenses, filters, dew shields, maps, charts, or any other necessities for Christmas, anniversaries, or birthdays unless thy spouse needs them for

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their own telescope.

9. Thou shalt not deceive thy spouse into thinking that ye are taking them for a romantic Saturday night drive when indeed thou art heading for a dark sky site.

10. Thou shalt not store thy telescope in thy living room, dining room, or bedroom, lest thou be sleeping with it full time.

### Addenda:

11. Verily, observe not through thy neighbor's AP or Tak, lest thee be utterly consumed by the lust of apo-fever, and thy brain and thy bank account shall shrivel and wither like branches in a flame...

### Addenda:

12. Verily, observe not through thy neighbor's Dob of Goliath, lest thee be lain bare to the fires of aperture-fever, and thy sanity, thy sacroiliac and thy life savings be crushed as ye grapes of wrath..

- [This fine work by "anonymous" is reposted, with additions, from a forward to the New Hampshire Astronomical Society list.]

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## Upcoming Star Parties and Registrations

**Winter Star Party** – February 20-25, 2006- Registration has ended but tickets are always available on Astromart and elsewhere.. Check [www.scas.org](http://www.scas.org) or call the registrar at 386-362-5995. This party is always sold out and you need to get a ticket early. This is a premium party and the weather is fantastic in the Florida Keys in February.

**Texas Star Party** – April 23-30, 2006 - TSP 2006 Reservations will include both on-site and off-site attendees, so everyone will need to submit a TSP Registration/Reservation Request Form , before January 17, 2006 which will be processed through a random drawing in late January 2006. This drawing will also include the allocation of all accommodations on the Ranch (camping and covered housing). The online form will be available starting November 1, 2005.

**Nebraska Star Party** – July 23-28, 2006 – This is a premier party with about as dark skies as you can find. Seven of us went out last year and had a ball. Join us next year and experience a truly dark site. [www.nebraskastarparty.org](http://www.nebraskastarparty.org)

If you know of events coming up let me know and I will get them in the Bulletin

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## Local School Events and Star Parties

Gerald Venne is our Public Program Chairman. He will be responsible for coordinating Public Events for the IAS. He needs your help. Let Gerald know if you would like to show the public our sky.

To schedule a public event contact Gerald Venne 1 317 826-2680 or Jeff Patterson at 1-317 882-8055.

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### Astro Ads

Are you changing or upgrading your equipment? Do you have or are you looking for astronomical materials and equipment? The Indiana Astronomical Society as a service to its members, will publish non-commercial ads at no charge. The ad will stay in the Bulletin for 4 months and may be renewed at the owner's request.

#### To place an ad contact:

Bulletin Editor  
Jeff Patterson  
1780 S. Morgantown Rd.  
Greenwood, IN 46143  
(317) 882-8055  
E-Mail: [JMPSR@Iquest.net](mailto:JMPSR@Iquest.net)

**For Sale** - Meade ETX-90EC astro telescope , it has the manual controller and the autostar computer controller, the worm gear has been replaced (Good as new). I have upgraded the finder to a 45 degree. Extras, 1 Meade super plossl 26mm eyepiece, 1 Sirius plossl 10mm eyepiece, 1 Orion illuminated ke12mm, 1meade 2x-3x variable barlow, 1 mead camera adapter (fits into eye piece hole), 1 Meade ETX camera adapter (fits onto back of ETX, 1 camera ring, 1 35mm Yashica camera, 1 remote camera switch, 1 Meade Series 4000 lunar filter, 1 45 degree prism adapter, 1#883 deluxe field tripod, 1 nice metal carrying case for the extras, am letting go also several star chart books ,the Norton 2000.0 sky atlas. \$700 obo thank you for your time. day time phone (317) 359 0229 John Miller (12/05)

**For Sale** –Celestron 20x80 mm binoculars and case. Excellent condition \$250. Jeff Patterson 317 882=8055 (2/06)

**For Sale** –Obsession 18” with ServoCat guidance. Galaxy F/4.5 premium primary. Many accessories. Outstanding images. Excellent condition \$6500. Jeff Patterson 317 882=8055 (2/06)

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### Loaner Equipment Program

Did you know you can borrow a scope or piece of astronomy equipment from the Society and take it for a test drive? The Society has a program where members who are trying to determine what kind of equipment to buy can borrow one of the Society's scopes for a month or two and see how they like it. John Molt is the chairman of

the program and can arrange for your pickup and training on the use of the particular instrument. This is a great way to see what telescope you want to purchase. We have several scopes, eyepieces and binoculars to loan. Contact John Molt at [1star-gazer@earthlink.net](mailto:1star-gazer@earthlink.net).

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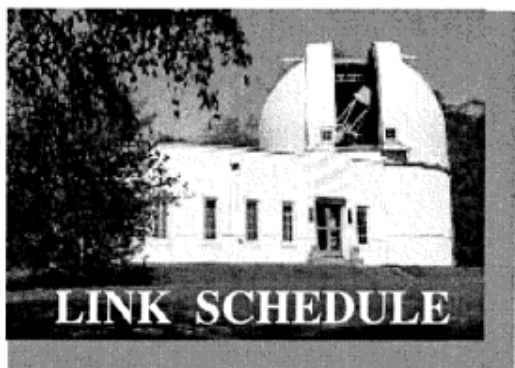
## List Server Online - Don't be left in the cold - Sign up!

This service is our main communication tool. The list server is in the "Members Only" section of the site and is accessible only by IAS members. Make sure we have your correct e-mail and you will have access for late updates to events and functions.

Note: The list server is for use of Society business. It can only be used according to the rules as outlined previously. Members abusing the service will be eliminated from the service.

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## Board Meeting – There is no Board meeting in December.



### Observatory Address

**Goethe Link Observatory  
8403 N. Observatory Lane  
Martinsville, IN 46151**

**Observatory's Phone:  
(317) 831-0668**

This schedule is being published to assure proper access to the Link Observatory for programs that are designed as observational, general education, astronomy conferences or amateur research projects. Training programs are tentatively scheduled for Saturday evenings only. Although other requests can over-ride these sessions. It is the purpose of this listing to prevent activity conflicts. If you need to acquire use of the 36-inch telescope: remember two important IAS guidelines: 1) *There has to be two or more IAS members present.....* 2) *contact the Observatory Manager: Gary Schoppenhorst (317)297-1405.* **DON'T WAIT UNTIL THE LAST MINUTE TO MAKE YOUR REQUEST OR YOU MAY NOT GET ACCESS.**

## Designated Link Observatory Key Holders

Jeff Patterson: 882-8055  
Tom Borlik: 849-4113  
Gary Schoppenhorst: 297-1405

Brian Murphy: 841-8511  
Dave Williams: 769-7430  
Gerald Venne: 826-2680

## Link Activities for December:

Observer's Meeting – None this month  
Link Training – None this month



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### **McCloud Activities:**

New Moon Group – None this month.

### **Observing Activities**

We are able to go to the Link, Prairie Grass Observatories and McCloud Nature Park at non scheduled times if they do not conflict with reserved activities:

For those interested in going to The Link Observatories for observing call Gary Schoppenhorst 1 317 297-1405.

For those interested in going to Prairie Grass Observatories for observing call Hoppe at 1-765-296-2753.

For those interested in going to McCloud to observe, please call the caretaker Cecil Rich at 765 366-3235 before 5PM on the day you want to go out.

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### **Bulletin Stats**

All personal and professional opinions presented herein do not, in any way, represent the opinion or policy of JPL or NASA.

### **Accessing the Bulletin**

The current bulletin can be found on the website [www.iasindy.org](http://www.iasindy.org)

### **Bulletin - Bulletin deadline on the 20th of every month**

The monthly newsletter welcomes articles of local astronomical interest information and want ads:

Please submit to

The Indiana Astronomical Society, Inc

Jeff Patterson, editor

1780 S. Morgantown Rd

Greenwood, IN 46143

Phone: (317) 882-8055

[JMPSR@Iquest.net](mailto:JMPSR@Iquest.net)

### **Membership information**

Contact any IAS officer or the membership chairman

Larry Phillips

9413 South PR Black Hawk Hills Dr.

Edinburgh, In 46124

[llpastro@lightbound.com](mailto:llpastro@lightbound.com)

### **Link Observatory**

Latitude: 39 degrees, 33 minutes North

Longitude: 86 degrees, 24 minutes West

Phone: (317) 831-0668

IAS Internet address

<http://www.iasindy.org>

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**Executive Officers**

President: Jeff Patterson (317) 882-8055

Vice-President and Program Director: Brian Murphy (317) 841-8511

Secretary: Larry Phillips (317) 729-2447

Treasurer: John Shepherd (317) 862-3442

**Board of Directors**

Gary Schoppenhorst (2006)

Gerald Venne (2006)

Thad Hatchett (2007)

Doug Brown (2007)

Bill Conner (2007)

Marion Hakes (2005)

John Molt (2005)

**Public Event Chairman**

Gerald Venne [gvenne@iquest.net](mailto:gvenne@iquest.net) 1 317 826-2680

**Library Committee Chairman**

Ed Otto [ecottol@comcast.net](mailto:ecottol@comcast.net)

**December Calendar, 2005**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 New Moon	2	3
4	5	6	7	8 First Qtr Moon	9	10
11	12	13	14	15 Full Moon	16	17 General Meeting Butler
18	19	20	21	22	23 Last Qtr Moon	24
25	26	27	28	29	30 New Moon	31

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**Membership Application to the IAS**

**Benefits:**

- Use of the Goethe Link Observatory
- Formal monthly programs with guest speakers
- Local and regional astronomical functions
- Discounted Astronomy publications
- New Moon observing activities
- Access to IAS member experts and problem solving
- The Bulletin monthly newsletter
- Free admission to the Holcomb planetarium
- Star party events and observing sessions

Please mark whether this is a new or renewal application

New

Renewal

Note: Magazine subscription renewals forms and payment must be submitted to the Treasurer in order to maintain publisher's club discount.

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

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

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

Telephone: ( ) \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

How do you want to receive the IAS monthly newsletter?

Downloadable from Website  Hard Copy\*

\* Please note that hard copy costs the Society about \$1.50 per issue. Please consider this when selecting mode of receiving the newsletter.

Annual Regular Membership (\$25.00)	
Annual Student Membership (\$10.00)	
Astronomy Magazine Renewal (\$34.00)	
Sky and Telescope Magazine (\$33.00)	
Total Enclosed	

Make checks payable to: The Indiana Astronomical Society, Inc

Please complete Member Profile and include with the application

Mail Application to: John Shepherd, Treasurer  
4609 Callahan St.  
Indianapolis, IN 46239

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**Member Profile**

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

Children's names and ages: \_\_\_\_\_

Education: \_\_\_\_\_

Occupation: \_\_\_\_\_

How many years associated with Astronomy? \_\_\_\_\_

Special astronomical interests or projects: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Equipment: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What can the Society do for you? \_\_\_\_\_

\_\_\_\_\_

What can you do for the Society? \_\_\_\_\_

\_\_\_\_\_

Note: Profile information is not a requirement for membership to the Society. This information is entered into the IAS database and is not given nor sold for solicitation purposes. It does provide for a brief welcoming article for new members and may be used by the society to match people with similar interests.