

The Bulletin – The monthly publication of the Indiana Astronomical Society

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The Bulletin

The October General Meeting, October 14, 7:00 PM Goethe Link Observatory

The Annual Hog Roast will be held at the Link Observatory October 14 beginning at 5 PM. The Society furnishes the meat and drinks. Please bring a covered dish. Traditionally this has been one of our best turnouts each year. Master chef Mike Kirsch will be roasting again this year. Come one come all. There will be no speaker this year as we will car pool to Morgan Monroe State Forest after the hog roast to see the IU telescopes in Morgan Monroe.

Field Trip to Morgan/Monroe

Dr. Caty Pilachowski and Dr. Kent Honeycutt have invited the IAS to tour their observatory facility in Morgan Monroe State Forest on October 14th as a continuation of Caty's program **FHiRE**. Plans are for us to meet at the Link Observatory for the annual Hog Roast at 5:00 PM and then caravan to the observatory site for the tour and hopefully to see the telescopes in operation.

If you like, you can stay at Link and observe if the weather permits.

Elections Are Coming

Man time flies! It is getting to be that time of year when we elect officers and Board members. Elections are in November. This year you will be electing the officers, President, Vice President, Treasurer, and Secretary, and two Board members. The Board has established a nominating committee to develop a slate of officers and Board members. If you have interest in running for an office or know someone who would be good, please let one of the members of the Committee know and we will place you on the ballot. You have to be a member in good standing and have been a member for at least a year. This is your chance to provide leadership in the Society and direction of its activities.

Nominating Committee:

Jeff Patterson – KB9SRB@hotmail.com

John Molt – 1stargazer@indy.rr.com

Thad Hatchett - astronomynut@sbcglobal.net

The Pres

New Astronomers Group Meeting
McCloud Nature Center
7:30 pm – September 29, 2006

The final meeting of the Indiana Astronomical Society's New Astronomers Group for 2006 will be held on Friday, September 29 at McCloud Nature Center starting at 7:30 pm, just prior to the monthly McCloud Friday Night Observing session.

THE NAG MEETING WILL BE HELD, RAIN OR SHINE.

Topics for this month:

- What's up in the Autumn evening sky?
- The Pointer Stars and The Summer Triangle
- Our Solar System
- The Autumn Deep Sky
 - M15 - Globular Cluster in Pegasus
 - M31 - Andromeda Galaxy in Andromeda
 - Alpha Persei Cluster in Perseus
 - NGC 869 and NGC 884 – The Double Cluster in Perseus
 - NGC 457 – Owl Cluster in Cassiopeia
- The Size of Our World
- A Beginners Introduction to the Telescope
- Question and answer session

The purpose and intent of the NAG is to introduce new astronomers to observing the night sky. All types of observing will be discussed including naked eye, binocular and telescope.

If the weather cooperates, following the meeting, IAS members will have telescopes set up and attendees will have an opportunity to view some of the night sky objects discussed during the meeting.

Observer's Corner

Flying Fishes - Sandy Wolford

Filling a mostly barren portion of the southern fall skies is the constellation Pisces, the Fishes. Pisces, which contains no stars brighter than 4th magnitude, occupies the area both below and to the east of the Great square of Pegasus, forming a V-shaped wedge between Pegasus and Cetus. One of the 12 constellations of the zodiac, it was seen by the ancient Greeks as two fish, joined by a knot at their tails. In old star charts, the fish were a little longer than they appear on modern charts and the "knot" shown as being the variable star Mira, "the wonderful", in Cetus. Surrounded by the more easily traced constellations of Pegasus, Andromeda, Triangulum, and Aries, the main claim to fame for the fishes is that around March 21st of each year, the sun crosses the celestial equator on its way from south to north in this area of the sky. This point is called the "vernal equinox" and is the zero hour point for marking right ascension in the plotting system used to map the skies (somewhat as Greenwich, England is the zero starting point for measuring longitude around the earth). Pisces offers a wealth of faint galaxies to those with 10-in

or larger telescopes but also has some suitable for smaller ‘scopes. The constellation contains some fine double stars, several of which are beautiful color contrast pairs.

Perhaps the easiest portion of Pisces to locate in the skies is the asterism referred to as the “Circler of Pisces”. Look just below the great square of Pegasus for a small circle of five or six 4th and 5th magnitude stars. Faint but distinctive, the Circler is only about 5° across so it just fits into the view of many binoculars and finder scopes. If you stretch the circle out to include a few fainter stars, the easternmost star in the now more oval circler is TX Psc, a deeply colored red carbon star, one of the brightest of this type in the sky. In spite of this, the color is sometimes disappointing to beginners expecting a deep red burning ember -- it appears more as a deep golden or reddish-orange color to many observers.

At a darker sky site, such as McCloud park, refer to a star atlas or perhaps the monthly sky charts published in Night Sky and other astronomy periodicals to trace the line of stars forming the western fish for 35-40 degrees (about 4 fist-widths) eastward from the circler to reach 4th mag alpha (α) Psc, the “knot” joining the two fish at their tails. Alpha Psc is a close double star which will probably require at least a 10-in telescope to split and is a test for good seeing conditions as well as good collimation of your telescope. Its close separation of less than 2 arc seconds requires high magnification to split; I could barely do so at 300x in my 8-in SCT.

A far easier double is the pretty zeta (ζ) Psc, about 12 degrees east of alpha in the western fish, perhaps $\frac{1}{2}$ of the distance from α back toward the Circler. It can be split in even the smallest telescopes to show the pair. Although I see them as blue-white and creamy white, the colors are variously described as "yellowish and pale lilac", "white and greyish", or "pale yellow and rose", which fits reasonably well with the spectral classes.

Galaxy NGC 488 can be found 2° E and 2° S of ζ -Psc. The 8-in ‘scope at 70x shows a faint, round nebulosity with no obvious central brightening of the core. 12-in and larger telescopes may pick up the mag galaxy NGC 490 lying 8’ NE.

The lone Messier object in Pisces, M74 (NGC 628), can be found 1½° E and ½° N of mag 3.5 eta (η) Psc in the straggling line of the northern fish. Perhaps the easiest way to locate η Psc is by first finding the distinctive arc of three magnitude 2-3 stars just south of Andromeda/Triangulum which form the horns of the ram in the constellation Aries. Follow the line from alpha (α) Ari through beta (β) Ari eastward about twice the distance between the two to land on η Psc. While you pass through the area, take a peek at gamma (γ) Ari, the third star at the western end of the ram’s horn; it is another nice and easy double star.

In my 8”SCT at 70x, M74 shows up as a moderately large, dim, formless, hazy patch of nebulosity. M74 has a reputation of being one of the more difficult Messier objects to log for those trying to complete this observing list. A face-on spiral galaxy, it has a low surface brightness and details are difficult even in larger telescopes.

Located inside the Pisces “V”, galaxy NGC 524 can be found approx 3° NE from the double star eta (η) Psc. NGC 524 shows as a moderately bright, small, round glow at 68x in my 8” SCT; 200x reveals it to be framed with faint field stars whose magnitude almost matches that of the galaxy core touching N and E sides of the galaxy halo and the nucleus brightening to an almost stellar core. NGC 524 is the brightest member of a group of at least ten galaxies; those of you with access to 14-in or larger telescopes can try searching for four dim (mag 14) galaxies which are within the same med power eyepiece field of view as NGC 524: NGC 516, 518, 525 and 532.

Continue up the line of the northern fish to find psi-1 Psc, about midway between M74 and the NW corner of the Pegasus square. Ψ -1 is a nicely matched pair of stars which is relatively easy to split even with the smallest telescope and makes a satisfying finish to a crisp autumn night.

Technical Data

Object	Type	RA	Dec	Mag	Size/Sep	Notes
psi-1 (74) Psc	DS	01h 06m	21° 28'	5.6/5.8	30" at PA 159°	
zeta (86) Psc	DS	01h 14m	07° 35'	5.6/6.5	23" at PA 63°	
NGC 488	Gal	01h 22m	05° 16'	10.3	5.2' x 4.1'	
NGC 524	Gal	01h 25m	09° 33'	12.0	3'	
NGC 628 (M74)	Gal	01h 37m	15° 47'	10.0	10.2' x 9.5'	
alpha (113) Psc	DS	02h 02m	02° 46'	4.2/5.1	1.8" at PA 272°	
gamma (6) Ari	DS	01h 54m	19° 18''	4.8/4.8	7.8" at PA 360°	
TX (19) Psc	St	23h 46m	03° 29'	4.9 – 5.8v		

Note for those with various observing projects: NGC 628 is on the Messier list. NGC 488 and 524 are included on the Herschel 400 observing list as well as Orion's Deep Map 600. ψ -1 Psc, ζ Psc, α Psc, and γ Ari are included in the AL double star observing list.

McCloud

Well our season at McCloud is coming to a close. Our last scheduled event is September 29. The Park Board has decided to demolish the Hanger which is the source of our electricity for the pads. We will be temporarily without power as they redirect their power to the equipment shed. We need to thank John and Vicki Switzer for the outstanding job they have done the past two seasons. It is hard to come up with a program every month. Next time you see them tell them how much you appreciate their efforts.

Remember you can still go to McCloud throughout the winter for observing sessions. Just let Paul Miner know that you are coming and remember no camping.

Okie-Tex a Bit Blustery

We had three good days at Okie-Tex then the weather got bad! Thursday morning after rain and thunderstorms all night we got the 75mph winds. Any tents standing, porta potties and a few scopes got destroyed. Several scopes went over including Rick's 20 inch, but it was undamaged and Friday night worked well. My G11 rode out the storm with the two foot stake and come along and paid off! Rick and I decided that Okie-Tex is darker than Texas and the Nebraska star party and well organized. Clear skies, Chris Dietz

Illinois Dark (24 hours a day) Skies Star Party

Mike Wolford

Illinois Dark Skies Star Party weekend has finally arrived! Sandy and I somehow managed to get on the road right at 8:00AM on Thursday morning just as we had planned.

Weather reports were horrible. Severe thunderstorms were forecast --- in Illinois the word “tornado” was in every prediction of the on-coming weather. But what the heck --- weathermen are wrong more than they are right --- right??

The trip to Jim Edgar Panther Creek State Park was relatively uneventful. The fun began when we arrived at the park. As we pulled onto the grass, next to a guy that was already set up, a vehicle followed us. It was the campground host declaring that there would be no parking on the grass. No matter that this star party has been held here for the previous five years and everybody has always parked on the grass, this was her watch, those were the rules and there would be no exceptions. Oh boy! Thankfully, there are several parking areas/loops that everybody could get their trailers, RV’s, and cars set up on. (Hopefully, this minor set-back will be resolved by next year.)

Later in the day, John and Vicki Switzer arrived. As they were setting up, I saw Terry Steadham pull in. Of the 160 or so people that were pre-registered, 50 of us braved the first night --- in spite of the weather forecast. I don’t think that it rained Thursday night, but the wind sure had us (literally) rockin’ and a rollin’ all night long.

On Friday, the bad forecast looked like it was going to become reality; severe thunderstorms with possible tornadoes were expected. Hearing this, several folks packed up and headed for home --- including John and Vicki. They had no sooner left the park, and then I ran into John Molt. About that same time, Danny and Debbie Mitchell (from the Bloomington Illinois area) arrived --- they completed getting their camper set up exactly at the right time. Danny unpacked his 24” Starmaster at home because the weather was going to be so horrible. All that he brought was his TV 101. Not the 24” scope, but better than nothing!

Have I mentioned the weather? It has been blowing constantly since we arrived. Finally the storms came.

Any thunderstorm that has hail in it gets my personal “yup, that was a good one” stamp of approval. This storm was one of those --- hail and all.

But wait --- after about 20 minutes there is a rainbow in the sky! Everybody scrambled to get scopes set up --- the skies were clear --- and VERY dark! We observed until somewhere around two AM --- a GREAT night!!

Logo Clothing

We still have IAS logo hats, t shirts, polo shirts, sweat shirts and insulated jackets. Please contact Gerald Venne at the next general meeting.

Mentor Program

The Board has been studying retention of members. Of the 50 or so members that do not renew their membership each year over half are first year members. So we want to do some things to reduce that exodus. We are reinstating the mentor program which will provide the new member

The Bulletin – The monthly publication of the Indiana Astronomical Society

with lots of information and help them assimilate into the Society. Thad Hatchett has volunteered to lead this program. We need your help. If you are interested in becoming a mentor please contact me at Jeff Patterson KB9SRB@hotmail.com or Thad Hatchett at astronomynut@sbcglobal.net. We will put your name on the list and assign a new person to you. Our goal is to retain people and make this hobby a lot more fun.

Upcoming Star Parties and Registrations

Twin Lakes Star Party KY Oct 14-21 225 miles 5 hour drive <http://www.wkaa.net/>

I am working on a new list of parties for next year. If you know of events coming up let me know and I will get them in the Bulletin

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.

Orchids and Onions

A bouquet of orchids goes to John and Vicki Switzer for their support of the NAG and observing programs at McCloud.

The Pres

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: KB9SRB@Hotmail.com

For Sale - Discovery Premium DHQ 10" f/6 Dobsonian reflector

Optics:

Primary mirror: 10" annealed Pyrex glass, premium aluminum coating

Minor diagonal: 2.14"

Focal length: 1524mm (60")

2" JMI Crayford focuser w/1.25" adapter

The Bulletin – The monthly publication of the Indiana Astronomical Society

Tube:

1-piece heavy duty sonotube, black
Tube length: 63"
Tube diameter: 12"
Tube weight: 51 lbs.
Ebony-Star formica bearing surfaces
Adjustable bearings

Base:

Quality, finished, solid birch construction
Dimensions: 15.5"W x 18.5"D x 16.75"H
Weight: 24 lbs.

Eyepieces:

Orion Expanse Wide-field set, 1.25" includes:
6mm, 9mm, 15mm, and 20mm, all in original boxes with end-caps.
J&T Series 500 10mm Plossl
Unknown brand multi-coated 25mm Plossl (really nice views)
Unknown brand 15mm AF40 Plossl (came with the telescope)
2" Orion Optiluxe 32mm, in original box with end-caps

Other accessories:

Telrad reflex sight
Orion 9x50 Correct-Image right-angle finder scope
1.25" Orion Variable Polarizing filter
Discovery Laser Collimator
Celestron Night Vision red LED flashlight
Lightweight observing vest (size: Large) with multiple pockets for eyepieces, etc.
Black eyepatch
Manuals for the 'scope, the 9x50 finder, and the Telrad.

All has been well-cared for and is in very good-to-excellent condition.

I bought the telescope (with telrad and one eyepiece) new in 2001 for \$1000.00
Asking \$950.00 for telescope and all accessories.
Pics available on request.

Contact Jane Stranger rstranger@insightbb.com

Loaner Equipment Program

The Loaner Program has been helpful to those new to the hobby and others in need of observing equipment. We consider offers of equipment you may not have need for any longer.

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.

The Bulletin – The monthly publication of the Indiana Astronomical Society

John Molt (lstargazer@indy.rr.com) or 317-844-1799)

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.

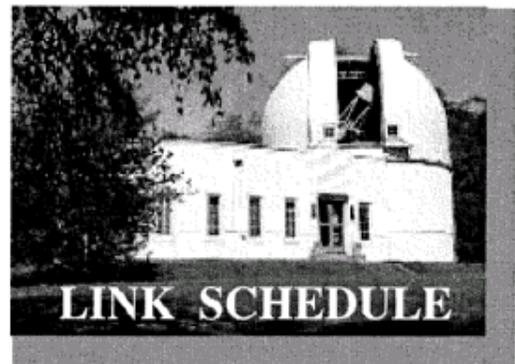
Board Meeting – October 14, 2006 - 4:00 PM Before The Hog Roast

The IAS Board Meeting is being held at the Link Observatory this month prior to the Hog Roast.

Goethe Link Observatory 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.*

Link Activities for October:

General Meeting – October 14
Observer's Meeting – October 28
Link Training – October 28
New Moon – October 21

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:

The Bulletin – The monthly publication of the Indiana Astronomical Society

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 Paul Miner at the park office 765 676 5490 before 5PM on the day you want to go out. As a last resort you can reach him on his cell phone at 317-371-8222 before 5 pm.

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

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

KB9SRB@hotmail.com

Membership information

Contact any IAS officer or the Treasurer

John Shepherd (317) 862-3442

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>

Executive Officers

President: Jeff Patterson (317) 882-8055

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

Secretary: Betsy Brown 1-317-872-4050

Treasurer: John Shepherd (317) 862-3442

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Board of Directors

Gary Schoppenhorst (2006)
Gerald Venne (2006)
Thad Hatchett (2007)
Doug Brown (2007)

Bill Conner (2007)
Marion Hakes (2008)
John Molt (2008)

Public Event Chairman

Gerald Venne gvenne@iquest.net 1 317 826-2680

Library Committee Chairman

Ed Otto ecottol@comcast.net

October Calendar, 2006

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

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*

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* 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

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.