



The Bulletin

Note: There is no general meeting on the 12th!!!

We are beginning to float the General meeting date to allow for more observing. Watch the Bulletin for the meeting dates.

The April General Meeting, April 26, 2008 7:00 PM Holcomb Observatory on the Butler Campus

Galaxy Clusters, Dark Energy, and the Large Synoptic Telescope (LSST)

Prof. John Peterson
Professor of Physics
Purdue University

One of the most exciting recent discoveries in physics is the apparent acceleration of the Universe. The mechanism for this is not understood and is often called "Dark Energy". Galaxy clusters, the largest structures in the Universe, can be used to study dark energy because their abundance and location is sensitive to the matter content of the Universe. I will show how some current data from X-ray and optical telescopes can be used to study dark energy. In the near future, a number of new telescopes are being built to address these topics in unprecedented detail. One of the most ambitious projects is called the Large Synoptic Survey Telescope (LSST), which will be the world's most powerful optical survey telescope. LSST will have an extremely large field of view (10 sq. deg.) and will collect 30 TBytes of data per night. An enormous database of galaxies, moving objects, and variable sources along with an extremely deep map of the sky will be made available to scientists and the general public. LSST may revolutionize our view of the Universe by addressing a wide range of science topics.

Prof. John Peterson received his undergraduate degree in physics at the University of Chicago, and a PhD in physics at Columbia University. At Columbia, he studied the X-ray spectra of clusters of galaxies using the XMM-Newton X-ray satellite. In 2003, he became a postdoctoral research associate at the Kavli Institute of Particle Astrophysics and Cosmology at Stanford University, where he continued to focus on the physics of galaxy clusters and their use in cosmological studies. While there, he began his work on

The Bulletin – The monthly publication of the Indiana Astronomical Society

the Large Synoptic Survey Telescope (LSST). He became an assistant professor of physics at Purdue University in 2006, studying galaxy clusters and the physical mechanisms operating in these clusters. This includes new precision measurements of dark energy and dark matter.

Note from the Pres

I will be out of town for a couple of months beginning April 14 for a long vacation. Carolyn and I will be going to the Texas Star Party by way of California and the desert southwest. If you have needs contact Doug Brown or one of the member's of the Board.

The Pres

IAS Calendar for April

April 12 **NAG at McCloud**

April 14 Butler has a public lecture series called the J. James Woods lectures in the sciences and mathematics. On Monday April 14 the lecture is "The Extravagant Universe" by Robert Kirshner, Clowes Professor of Science at Harvard University and Harvard College Astronomy Professor. The lecture is in the Butler Union, i.e. the Atherton Union, Reilly Room at 7:30 PM.

April 26 **General Meeting at Butler**

May 2-4 **Astronomy Weekend - Three day outing at Prairie Grass
Observatories beginning Friday at 5pm**

May 3 – Public fair at McCloud

May 3 Girl scouts at Spiceland

NAG Returns to McCloud

This Spring and Summer we will hold our New Astronomer Group (NAG) meetings at McCloud Nature Park on first quarter Moon on Saturday nights. The meetings begin at 7:30 rain or shine and then weather permitting, you can observe the rest of the evening and share our stars with our visitors. McCloud has purchased six Dobsonian telescopes for the public to use and we need to help them learn to use them. Come out for a fun night.

Please note: For safety reasons, McCloud has asked that we do not drive on the grass even back where the pads are. Park on the gravel and transport your equipment to the observing sites. They plan to close off the road to the back about dark. Those of us who use trailers to work from I suggest that you park along the road going to the back and work from there.

It's spring again and time for the first monthly meeting of the Indiana Astronomical Society's New Astronomers Group for 2008. We will be meeting on **Saturday April 12 at McCloud Nature Park starting at 7:30 pm.**

THE NAG MEETING WILL BE HELD - RAIN OR SHINE.

Discussion topics for this month:

- Observing the April Evening Sky
- Reading a Star Chart
- The Spring Pointer Stars
- Dabbling in the Dippers
- Our Solar System
- Our Deep Sky Objects for April
 - M42 – The Great Orion Nebula
 - M44 – The Beehive Cluster
 - M45 – The Pleiades Open Star Cluster
 - M81 – Bodes Galaxy
 - M82 – The Cigar Galaxy
- A Trip Through Mariner Valley
- 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.

The night sky can be an intimidating place. With a little help everyone can enjoy the celestial beauty that we have all taken for granted our whole lives. From the constellations to the deep sky; with the naked eye or with a telescope, there is something for everyone to enjoy.

NAG Dates for 2008

Please mark your calendars for the NAG dates this year

Saturday, April 12, 2008

Saturday, May 10, 2008

Saturday June 14, 2008

Saturday July 12, 2008

Saturday August 9, 2008

Saturday September 6, 2008

May Joint Event with WVAS – Astronomy Weekend May 2-4

We will hold our second annual Astronomy weekend at Prairie Grass Observatories May 2-4.

You can come and camp and have a mini star party and spend the weekend. Festivities start on Friday about 5PM.

Daffodyls

There is good news this year about the Daffodyls. The daffodil society and people from the Morgan County pPark Board are entering into an agreement to work the beds and help us with the visitors to Mrs. Link's beds. This is the greatest news we have had in a long time.

Link Mirror

We have just received word that the mirror has been recoated and is now back at IU. We are awaiting an appropriate time to reinstall it.

Jeff

ALCOR OBSERVATIONS

ALCONEXPO 2008

The Astronomical League annual Convention and Exposition will be held in the Midwest this Summer. The place, Des Moines, Iowa. The date, July 18 & 19. This convention will be hosted by the Des Moines Astronomical Society.

Astronomical League conventions provide an opportunity for amateur and professional astronomers from all over the country to gather together to learn and exchange ideas, techniques, and opinions on astronomy. Presentations by professional astronomers allow the amateur to learn about the latest discoveries in astronomy directly from astronomers making the discoveries.

There are speaker tracts both days, as well as a commercial vendors exposition, and information and exhibits from astronomical clubs, organizations and special projects.

Social events include a Star-B-Que on Friday evening at Ashton Observatory and the Annual AL Awards Banquet on Saturday night. See the March issue of the *Reflector* and visit www.alconexpo.com for more information.

Bill Conner AlCor

Observer's Corner

Constellation Spotlight – Corvus

Open any current astronomy periodical and you'll find the premier constellations of spring highlighted -- usually Ursa Major and/or Virgo. Unfortunately, the Bear and the Lady have waaay too many nice objects to pick just a few. So, never being the type to follow the crowd anyway, our spotlight this month is more in keeping with our country heritage. We're going hunting for an old crow,

Step outside just after dark in April/May and look almost due south. Just over 2-fist-widths above the horizon and 1 or 2 fist-widths to the west of the bright star Spica, you will find a distinctive crooked square of 3rd magnitude stars. Although the constellation is not large, it stands out nicely and using a LOT of imagination, this is our bird of the month. Corvus, the Crow, is

one of the oldest constellations and is a member of the 48 constellations originally drawn up by Ptolemy in the 2nd century. Several legends are attached to our bird, among them being one in which Apollo asked the crow to bring him a cup of water. Unfortunately, Corvus got side tracked by some juicy fruits and spent too much time waiting under a fig tree for the fruit to ripen instead of quickly fetching the drink as instructed. Corvus then returned to Apollo carrying a water snake, alleging that this was the cause of his delay. In punishment for his lie, he was thrown into the sky along with the Cup (Crater, just the west of Corvus), and Snake (Hydra, winding its way along most of the southern horizon).

Can you detect the subtle color differences in the four corner stars of the Corvus trapezoid? Gamma (at the NW corner) is a spectral type B star with a silver-blue color while epsilon (the SW corner) is an orange type K and beta (the SE corner) is a yellow type G. Delta (the NE corner), a bluish type A, is also an attractive telescope double star; examine it at around 100x to spot the fainter secondary.

Located due west of Spica and claimed by Virgo, galaxy M104 is actually more easily located by starting in Corvus. Extend a line connecting the SW corner of Corvus to the NE corner and keep going for the same distance again to locate it. An equally good method with binoculars or finder scope is to position the bright pair delta and eta Corvus (at the top left corner of the Corvus square) at the SW edge of your field of view and look for a nice Y-shaped asterism about 3 degrees north of the pair. The base of the Y points to M104 like a directional arrow. M104 is easily seen in even the smallest of telescopes. In my 8" telescope it appears as a bright spindle oriented E-W with a round nuclear section. A slightly larger telescope will show the dark lane that runs along one side of this galaxy and earned it the nickname of the "sombbrero galaxy".

Corvus is also denied custody of the globular cluster M68, claimed by the snake Corvus is sitting on. M68 can be found 3 degrees south of beta Crv (the lower left corner of the Corvus square), just ½ degree NE of a bright 5th magnitude star. In my 8", it is a moderately bright round glow, brighter to the center. The edges just fade from view with no stars resolved.

From M68, drop south 3 degrees then sweep due east for 12 degrees to find galaxy M83. Also officially claimed by Hydra, M83 appears in my 8" as a moderately large softly glowing irregular oval oriented E-W. It brightens gradually to a slightly brighter central condensation; dim foreground stars are visible at the middle and W end.

Planetary nebula NGC 4361 inside the Corvus square is easily located with a Telrad since it lies equidistant from the two top stars of Corvus, two degrees from each. In the 8", it appears as a circular hazy spot almost resembling a faint globular cluster. The central star, magnitude 12.9, is difficult to see unless using a larger telescope.

CHALLENGE FOR LARGER TELESCOPES: NGC 4038/4039, the "antennae" or "rat tail" galaxy is actually two galaxies appearing to be joined at right angles on one end. To locate it, move from delta to gamma Crv and continue west for the same distance. While it takes a 15" or larger telescope to discern the two components, an 8" telescope should reveal that the galaxy seems to have an irregular shape with a notch missing in the SW area. I have seen this galaxy described as "cashew" or "kidney" shaped and either would describe how it appears in a 12" or larger telescope. In my 12.5" telescope under typical dark Indiana skies, the galaxy is a faint comma shaped smudge of light, moderately large, covering about 1/8 of the field of view using an eyepiece with a ¼ degree FOV. If you successfully locate the antennae, look about ½ degree SW to find galaxy NGC 4027. It appears in my 12.5" as a faint, irregularly round glow that gradually brightens a bit toward the center.

OBJECT	TYPE	RA	DEC	MAG	SIZE/SEP	NOTES*
NGC 4027	Gal	12h 00m	-19d 16m	11.1	2.4' x 2'	H, A
NGC 4038/4039	Gal	12h 02m	-18d 52m	10.7	1.7' x 1.2'	H, H2, A, C
NGC 4361	PN	12h 24m	-18d 48m	10.9	80"	H
Delta (7) Crv	DS	12h 30m	-16d 31m	3.0/9.2	24.2"@214	DS
NGC 4594 (M104)	Gal	12h 40m	-11d 37m	8.3	8.9' x 4.1'	M
NGC 4590 (M68)	GC	12h 40m	-26d 45m	7.7	12'	M, GC
NGC 5236 (M83)	Gal	13h 37m	-29d 52m	8.2	10.0' x 8.0'	M

*NOTE: For those of you working on various observing projects, "M" = AL Messier and Binocular Messier list, "H" = AL Herschel 400 list, "H2" = AL Herschel II list, "A" = AL Arp Galaxy list, "C" = Caldwell list
Sandy Wolford

IAS LIBRARY AVAILABILITY DURING THE WINTER AT BUTLER:

Because of the size of the IAS library and the difficulty in transporting it, only a reduced selection of it (about 25%) will be available during the general meetings at Butler's Holcomb Observatory. If you have a particular book you want to be brought to Butler, examine the complete list (<http://www.iasindy.org/memonly/iasfiles.php>, which is password protected) and send a message to the librarian (marcus@mwmacoustics.com) and he will bring it to the meeting.

Larry A. Marcus

IU Kirkwood Observatory

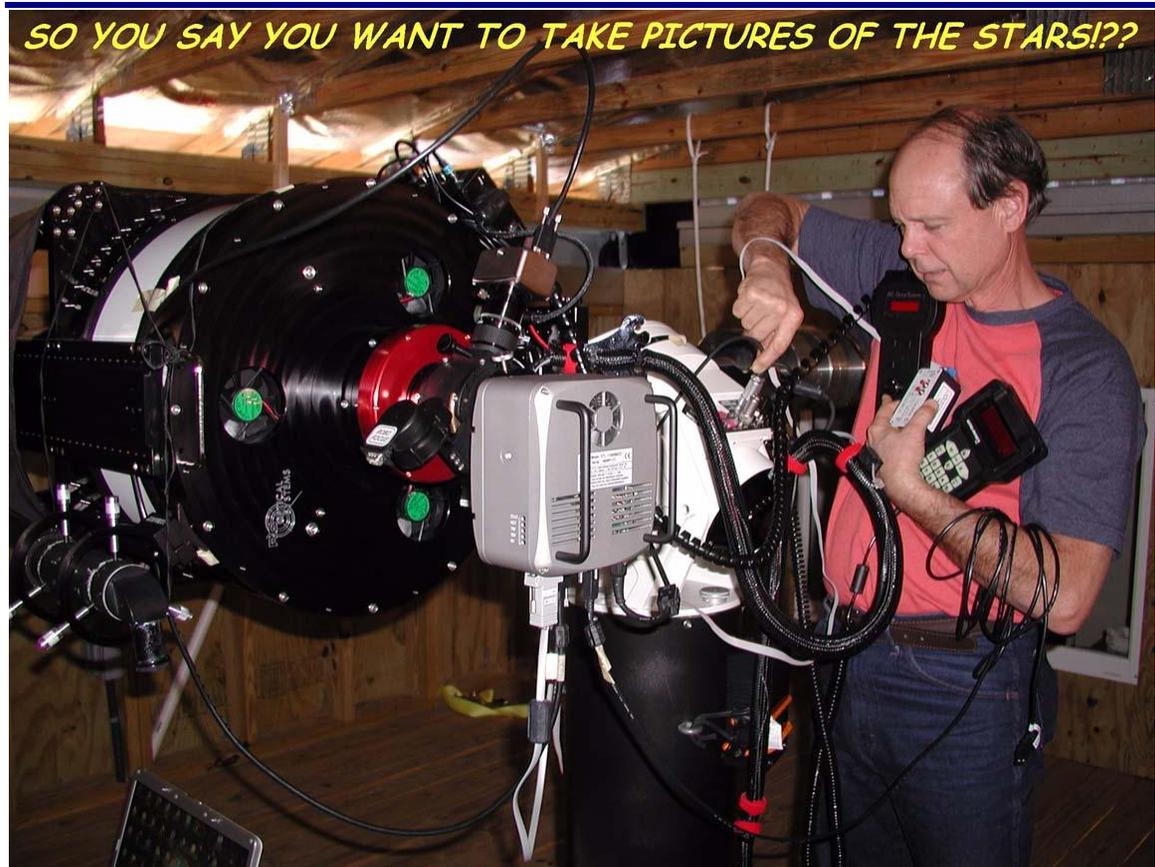
Kirkwood Observatory on the IU campus will reopen this month on Mar. 19, 2008 from 9-11pm. Saturn is well-placed for viewing this spring, and we should get a great view of the ringed planet if the weather is good. Mars is high in the sky this month as well.

The Observatory will be open every Wednesday night, weather permitting, from March 19 through November, 2008. Please visit our schedule at http://www.astro.indiana.edu/kirk_sch.shtml, for a list of dates and times. For updated weather conditions and closings, please call the Kirkwood Observatory Hotline at (812) 855-7736.

The IU Astronomy Department has an electronic bulletin to let people know about local astronomy activities and events. If you would like to subscribe, send an email to astdept@indiana.edu and we'll put you on the distribution list. Information about activities and events to be included in the e-bulletin should be sent to catyp@astro.indiana.edu.

Gadgets and Gizmos

I thought this was an interesting photo.



Meet Our New Members

The Society has five new members so far this year. We welcome

David Clark	Indianapolis
Jeffery Clemens	Carmel
Marion Klaes	Seymour
Gregory Plau	Fortville
Richard Rhodes	Indianapolis

The Society wants to welcome each of you and if you have any questions do not hesitate to ask.

Seek out new members out and see if you can help them out.

The Pres

Mentor Program

Are you new to the Society? New to Astronomy? Do you have a question about your new telescope? Please feel free to contact Thad Hatchett at astronomynut@sbcglobal.net. I can help, or at least direct you to a resource that can answer your question.

The mentor program will provide the new member with lots of information and help them assimilate into the Society. Thad Hatchett has volunteered to lead this program. We need your

The Bulletin – The monthly publication of the Indiana Astronomical Society

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. Our goal is to retain people and make this hobby a lot more fun.

Upcoming Star Parties and Registrations

Tennessee Spring Star Party - Fall Creek Falls State Park Apr 4 - 6
<http://www.personal.bna.bellsouth.net/s/p/spsmith/default.htm>

Mid-South Stargaze Apr 4 – 6
The Observatory is one mile southeast of the Natchez Trace Parkway at French Camp. French Camp is about half-way between Jackson and Tupelo, Mississippi, at Natchez Trace mile marker 181. Mississippi <http://www.rainwaterobservatory.org/stargaze/index.htm>

Indiana Astronomy Day (IAS/PGO) - May 2 – 4 Camp Cullom
<http://jmmahony.home.insightbb.com/pgo/schedule.html>

Michiana Star Party – May 2-4 Potawatomi Wildlife Park, Tippecanoe, IN

Hidden Hollow Star Party – Mansfield, Ohio May 2-4 www.wro.org

JEPC Star Gazing Event IL May 29-June 1
<http://www.mikewolford.com/IEPC%20Event.htm>

Apollo Rendezvous – Dayton, Ohio June 13-14, 2008
<http://mvas.org>

Cherry Springs Star Party Cherry Springs State Park, PA May 29- June 1
<http://www.astrohbg.org/s4>

Texas Star Party West Texas June 1-8,2008. This is a premier party with very dark skies and a great site. Just a long way. Online registration will open November 15. www.texasstarparty.org

Heart of America Star Party MO June 26-June 29 (Possibly stay until July 5th)
<http://www.hoasp.org/>

Nebraska Star Party – July 27-August 1 - North Central Nebraska - 950 miles 18 hour drive. This is a premier dark site and has fantastic observing. However, the weather is brutal. Temperatures can reach 105-110 degrees. However you can cool off in the shade of the tree. All activities will be at the Snake Creek Campground again this year. (I wonder why they call it Snake Creek). No activities will be at the resort. <http://www.nebraskastarparty.org/>

EPOCH 2007 The 21st Century Midwest Star Party Jul 29 - Aug 3
Beaver City, Indiana This is a new star party put on by 20-20 Telescopes.
<http://www.2020telescopes.com/EPOCH2007.html>

Indiana Family Star Party Camp Cullom, Frankfort, IN Jul 31 - Aug 3
<http://jmmahony.home.insightbb.com/pgo/starparty/>

The Bulletin – The monthly publication of the Indiana Astronomical Society

Black Forest Star Party PA Date To be announced
<http://www.bfsp.org/starparty/>

Astrofest Kankakee, IL September 5-7th, 2008
<http://www.chicagoastro.org/>

Prairie Skies Star Party – Kankakee IL – September 25-28, 2008
<http://www.prairieskies.org/>

Illinois Dark Skies Jim Edgar Panther Creek State Fish and Wildlife Area II.
September 25-28 <http://www.sas-sky.org/>

Twin Lakes Star Party Pennyville State Park, Western KY Sep 27 - Oct 5
<http://www.wkaa.net/>

Okie-Tex Star Party Camp Billy Joe, OK Sep 27 - Oct 5
<http://www.okie-tex.com/>

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

Public Outreach Programs

Gerald Venne is our Public Events Coordinator. 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.

Gerald has a scout event May 3. If you can help please let him know.

We need people to help at Link and elsewhere. It is actually a lot of fun.

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

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) 300-0449

E-Mail: KB9SRB@Hotmail.com

The Bulletin – The monthly publication of the Indiana Astronomical Society

For sale: 2 Televue eyepieces

4.8mm Nagler

17mm Type 4 Nagler

(The 17mm Nagler is a 2" eyepiece)

Both for \$350 obo

Contact: Jim Zdobyak 317-862-4715 or zobe1@aol.com

For Sale – Astro-Physics 400 German Equatorial Mount

Near new condition. Used less than a dozen times.

9 lb. Stainless Steel Counterweight

6 lb. Stainless Steel Counterweight

Wooden AP case

Encoders

NGC-MAX DSC Computer

\$1995

Contact: Jim Rinehart 317-881-3475 or jrine33@comcast.net

For Sale - Astronomy photographic prints for sale. The prints are displayed at <http://www.dougstastro.net>. 12" X 18" prints are \$25.00 and 8" X 12" are \$15.00. All of the images were taken by Doug Sanquetti. Most were taken locally near Cicero, IN but a few were taken at Star Parties. Any print on the web site may be ordered by contacting Doug at drsanqun@gmail.com

For Sale The Sky 6 "Professional" software (opened) - \$125

(This may have been installed already . Not sure if it's been registered

US Naval Observatory Double Star CD 2006.5 (unopened) - \$50

GSO Plossl 32 mm (unopened) - \$20

Quantum International tripod used, about 50" high (for camera) - \$20

Ambico tripod used, about 50" high (for camera) - \$10

New #15 HP (black) printer cartridge (purchased new printer - past 'returnable' date) - \$15

John Molt (email or 317-989-1875)

For Sale Meade 10" LX200 EMC (Schmidt-Cassegrain Telescope) with roller field tripod stand and DC Power System. Serial Number 119247. It was purchased in 1997. Unit is in excellent shape. It has never been out overnight. Includes 26mm, 6.4mm, 12.4mm eyepieces, camera adapter, eyepiece holder, t-mound adapter, diagonal prism, 8x50mm s-t viewfinder Interested parties can come by to see it. I am located in Fishers, IN. \$1299.00

Contact:

Damon Davis

317-432-0501

Onions and Orchids

Thanks to the Doug Brown and the Board for helping me with my being gone for so long. Without their help, things would not get done for the next two months. Jeff

The Loaner 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.

John Molt (1stargazer@indy.rr.com) or (317) 989-1875

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.

Being a member does **not** mean you are automatically entered into the "Members Only" section and the have the List Serve available. If you are a new member please go to the "Members Only" section and fill out an application. The webmaster will set you up and notify you that you can get into the system.

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 – Board Meeting May 1, 2008

The IAS Board Meeting is being held at 430 Massachusetts Avenue in downtown Indianapolis. The building is at the point of convergence of Mass. Ave., Vermont and Alabama Streets. There is a Starbucks located in the frontage of the building. The coffee shop stays open late into the evening. Try to park as close to Starbucks as possible, preferably in a metered space. On-street parking is free after 5pm. Handicapped parking is directly in front of Starbucks entrance. The main entrance to the building is to the right of Starbucks, but it will be locked. To get into the building, go to the shop Silver in the City. Tell them you are here for the astronomy meeting and go through the back door of the shop into the office building. We meet in the basement. Ride the elevator (around the corner to your left) to the basement. Turn right as you exit the elevator and go through the first door on your right. This is the conference/meeting room. If you need further assistance, please contact Brian P. Murphy, IAS Vice-President on his cell phone 716-8124.

General Meeting Dates 2008

The Board has made a major decision for the Society. In years past there have been major conflicts with star parties and other events and the General meeting which is held the second Saturday of the month. The Board has decided to "float" the date of the general meeting each year based on the phase of the moon. Basically the general meeting will be held close to third quarter moon. The dates of the general meetings will be published at the beginning of each year. We think this change will provide the following benefits:

The Bulletin – The monthly publication of the Indiana Astronomical Society

1. Allow us to schedule NAG (New Astronomer's Group) meetings at McCloud on Saturday nights good for observing with the public.
2. Prevent conflicts with star parties that generally occur around the new moon which is early in the month in 2008.
3. Still provide observing opportunities at the Link during the Summer months.
4. We will continue to float the Observer's meeting at the Link to provide the best observing possible.

January through March - will stay on the 2nd Saturday at Butler

April 26 at Butler

May 31 at Link

June 28 at Link

July 26 at Link

August 23 at Link

September 20 at Link

October 18 at Link (Hog Roast)

November 15 at Butler

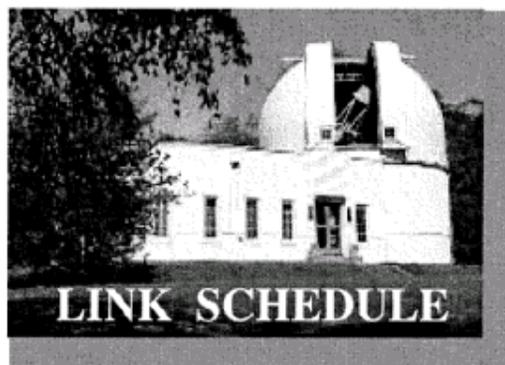
December floats for the Christmas Party at Butler

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 April:

None planned for the month

McCloud activities for April –

NAG April 12

The Bulletin – The monthly publication of the Indiana Astronomical Society

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 park caretaker, Jim Holtsclaw, at the park office 765 676 5490 before 4PM on the day you want to go out. He will give you permission to be there at night and cut off the lights.

Bulletin Stats

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) 300-0449

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) 300-0449

Vice-President and Program Director: Doug Brown (317) 872-4050

Secretary: Betsy Brown 1-317-872-4050

Treasurer: John Shepherd (317) 862-3442

Board of Directors

Gary Schoppenhorst (2009)
 Gerald Venne (2009)
 Tom Borlik (2010)
 John Switzer (2010)

Ron Burgess (2010)
 Marion Hakes (2008)
 John Molt (2008)

Public Event Coordinator

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

Library Committee Coordinator

Larry Marcus marcus@mwmacoustics.com 317 842-6658

Astronomical League Coordinator

Bill Conner wmtconner@sbcglobal.net 1-812 828-0449

April Calendar, 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5 ●
6	7	8	9	10	11	12 NAG at McCloud ☾
13	14	15	16	17	18	19
20 ○	21	22	23	24	25	26 General Meeting at Butler
27	28 ☾	29	30			

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
- Membership in the Astronomical League
- 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.

The Bulletin – The monthly publication of the Indiana Astronomical Society

Annual Regular Membership (\$30.00)	
Annual Student Membership (\$10.00)	
Astronomy Magazine Renewal (\$34.00)	
Sky and Telescope Magazine (\$33.00) (New Subscription)	
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.