

October, 2005
Volume 72, Issue 10
www.iasindy.org



The Bulletin

The October General Meeting, October 8, 7:00 PM Goethe Link Observatory

MARS - OBSERVE IT AND SHOOT IT!

With Mars fast approaching opposition the coming month or two will afford a great opportunity to observe and photograph Mars. After all - it will appear to be larger than the Moon!! (Just kidding). Mars reaches opposition on November 7, 2005. Its disk will subtend about 20 arc seconds. While not quite as close as the 2003 opposition, this time Mars is higher in the sky. This means less atmospheric "goo" in the way.

Award winning astrophotographer Bill Conner will provide CCD imaging tips for Mars. Bill will address the equipment required for good results and, weather permitting, will demonstrate his techniques outside (after the meeting).

Program Chairman Brian P. Murphy, who will discuss visual Mars observing, will follow Bill's presentation. Brian will cover filters, eyepieces, Mars disk features, and other observing tips.

Annual Hog Roast October 8, 2005 at the Link Observatory 5:00 PM

We are planning our annual hog roast to be held October 8 at the Link. All members and families are invited. The Society will furnish the meat and drinks and table service. Please bring a vegetable or dessert. This has been a very successful event and we always had a lot of fun. Plan on coming out. Remember the whole family is invited.

Mars IS Coming!!! This Is Not a Hoax!!!

In August 2003 Mars was the closest to the Earth that it had been in recorded times. Observers went nuts and we had a ball. Well, we even have a better chance this month and next. Although it is 25% further than 2003, Mars will be 30° higher in the sky and we in the northern latitudes will have probably the best viewing until 2020. Get out and observe. Pray for no dust storms.

We will hold Mars observing sessions at the Link on October 8 and 22 and November 5 and 19. There will be a McCloud New Moon on November 4 for observing Mars. Butler will probably hold events in November for the public and will need help. In 2003, we had as many as 2000 people at Butler each night. We will need scopes then. Stay tuned for breaking news.

Astronomy Magazine Subscription Rates Rise

Effective immediately, the subscription rate for Astronomy magazine has risen to \$34.00. Please include the new amount when ordering Astronomy magazine.

Mars at McCloud - November 4, 2005

We will hold our last scheduled event of the season at McCloud on November 4. This should be a really good time to see Mars. We are inviting the public so please bring your scopes.

McCloud Under the Stars – September 2-5 Labor Day Weekend

Wow, What a weekend! The weather was actually gorgeous.

The weekend began on Friday night with the NAG meeting. John and Vicki held the NAG meeting at seven, several interested folks attended. Then finally darkness came, following the dew. Yes, the dew was there before it got dark! Then the fog rolled in. We need longer telescopes to get over the layer. Some even suggested that we rename it “McFog”.

During the day on Saturday, many of us watched the Hubble video collection DVDs from 2004 and 2005. While the videos were playing, several others were doing some solar observing through a couple of Coronado scopes that were set up in front of the maintenance building. There was some coronal activity and only a few sunspots.

Saturdays dinner was catered by Angie Molt our favorite caterer. Man did we pig out! Thank you Angie for everything that you do for us!

Those of us who were fortunate enough to be able to make the trip to Nebraska this year met Dan Mitchell. Dan is from Bloomington, Illinois, and came over with his wife Debbie and itty bitty puppy to share views through his 24 inch Starmaster --- NICE SCOPE!! Oh --- the itty bitty puppy, is Bo, an English Mastiff weighing a mere 190 pounds!

Saturday night was pretty much a repeat of Friday night. A lot of dew, fog rolling in and out, but those of us with dew heating equipment were all able to observe. A couple of people that didn't have dew equipment improvised in the true nature of ATMing. A few others went on home --- I'm sure that those few will be making additions to their equipment cases soon. Hey, it'll be cheaper than that one way ticket to Arizona!!!

Sunday night, our bonus night, was pretty much a bust. Many got to see a few things, but the fog rolled in and didn't leave. Most of us gave up early and went on to bed.

There are 83 names on the attendance sheets. When I did a walkabout, I counted 21 telescopes and six mounted binoculars.

All in all, a great weekend. I believe that everybody had a great time and it was a good closing to the third year of astronomy at McCloud. John and Vicki --- thank you! The NAG program has been quite successful. I am sure that whatever you two put together for next year will be wonderful!

The Bulletin The monthly publication of the Indiana Astronomical Society

Bottom line --- SUCCESS!!!
Thank you everybody for your support.

Mike Wolford
mwolford@crtcblue.com



Where No Spacecraft Has Gone Before

Voyager 1, after 28 years of travel, has reached the heliosheath of our solar system.

by Dr. Tony Phillips

In 1977, Voyager 1 left our planet. Its mission: to visit Jupiter and Saturn and to study their moons. The flybys were an enormous success. Voyager 1 discovered active volcanoes on Io, found evidence for submerged oceans on Europa, and photographed dark rings around Jupiter itself. Later, the spacecraft buzzed Saturn's moon Titan—alerting astronomers that it was a very strange place indeed! —and flew behind Saturn's rings, seeing what was hidden from Earth.

Beyond Saturn, Neptune and Uranus beckoned, but Voyager 1's planet-tour ended there. Saturn's gravity seized Voyager 1 and slingshot it into deep space. Voyager 1 was heading for the stars—just as NASA had planned.

Now, in 2005, the spacecraft is nine billion miles (96 astronomical units) from the Sun, and it has entered a strange region of space no ship has ever visited before.

“We call this region ‘the heliosheath.’ It’s where the solar wind piles up against the interstellar medium at the outer edge of our solar system,” says Ed Stone, project scientist for the Voyager mission at the Jet Propulsion Laboratory.

Out in the Milky Way, where Voyager 1 is trying to go, the “empty space” between stars is not really empty. It’s filled with clouds of gas and dust. The wind from the Sun blows a gigantic bubble in this cloudy “interstellar medium.” All nine planets from Mercury to Pluto fit comfortably inside. The heliosheath is, essentially, the bubble’s skin.

The Bulletin The monthly publication of the Indiana Astronomical Society

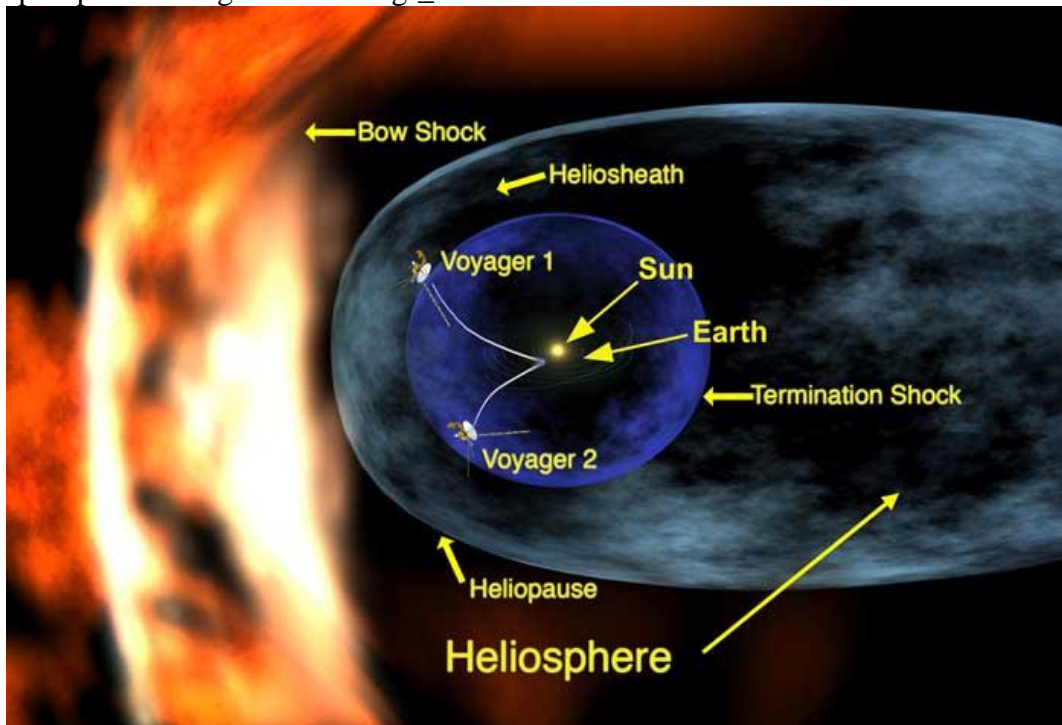
“The heliosheath is different from any other place we’ve been,” says Stone. Near the Sun, the solar wind moves at a million miles per hour. At the heliosheath, the solar wind slows eventually to a dead stop. The slowing wind becomes denser, more turbulent, and its magnetic field—a remnant of the sun’s own magnetism--grows stronger.

So far from Earth, this turbulent magnetic gas is curiously important to human life. “The heliosheath is a shield against galactic cosmic rays,” explains Stone. Subatomic particles blasted in our direction by distant supernovas and black holes are deflected by the heliosheath, protecting the inner solar system from much deadly radiation.

Voyager 1 is exploring this shield for the first time. “We’ll remain inside the heliosheath for 8 to 10 years,” predicts Stone, “then we’ll break through, finally reaching interstellar space.”

What’s out there? Stay tuned...

For more about the twin Voyager spacecraft, visit voyager.jpl.nasa.gov. Kids can learn about Voyager 1 and 2 and their grand tour of the outer planets at spaceplace.nasa.gov/en/kids/vgr_fact3.shtml.



Astrofest a Bit Muggy and Bright



Most of us met at the party Thursday afternoon. I believe there were eleven members from the IAS present. This is traditionally not an observing session but generally had a good vendor market and an excellent flea market for used equipment. That was not really the case this year. For some reason, the vendors were somewhat short with several no shows. 20/20 had a big display as well as Camera Concepts I can guess it may be the price of gas. We did hear some sad news for those of us who frequent star parties. Judy of Astrosystems fame has decided to not come to the outdoor events. Man! I am not sure where I will get my wife's presents as Judy always had trinkets to sell. We will miss her. There was much less equipment for sale as well. That that we had was traded pretty well among ourselves.

Thursday night was a bust due to clouds and Friday night and Saturday night were only fair. We seemed to have a lot more light than normal. I understand they have built a new prison in Kankakee and that may be the problem. I did get some good views of Mars with the 7" F/15. I am really looking forward to later in October for the Mars event. Saturday night ended with a lot of screaming as a pretty nice aurora became visible. It died out fairly fast and we all went to bed.

The Bulletin The monthly publication of the Indiana Astronomical Society

All in all it was a lot of fun. I decreased my telescope stable by one and didn't buy much. That is a successful trip for me. I really wanted a set of Dienkmeyer binos but successfully held off the urge.

The Pres

McCloud Nature Park Project

The barn is done and ready for the electricity! Mike, Bill and I have worked over a week getting the "kit" put together. And we did not kill each other. Roof is on and painting was done this weekend. Many thanks for the help from Mike Wolford, Bill Conner, Jeff Patterson and Marty Lien. John and Bethany Molt did the final painting. Thanks to everyone for their help!! We will have electricity there by mid October. Plans are then to go forward with the pads either this Fall depending on weather or next Spring. We will need more help when that time arrives.



Mike and Jeff working on the end pieces.

The Bulletin The monthly publication of the Indiana Astronomical Society



Marty Lien putting the finishing touches on the roof.



Bethany Molt putting the final touches on the warming building.

McCloud Nature Park Project Fund

Bill Conner wins the Orion Telescope!!

Congratulations to the winner, Bill Conner. The raffle raised about \$900. Special thanks to all members who participated. EXTRA special thanks to one member family that donated \$500. Thank you to Brian P. Murphy for donating the scope. To date the McCloud fund has about \$1200 in it. We are planning another raffle for December - details to be announced.

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

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

Upcoming Elections

Man!! Time flies!! The Board is seeking names of people interested in leading the Society. Each year the Officers and specific Board positions are up for election. This year the four officers positions and two Board members are up for election. The elections are in November but a list of nominees has to be in by October. If you have a desire to lead the Society and help it to grow, we need you. It is not hard work and at times is really fun. It is not a closed group. Any eligible member is welcome.

See anyone on the Board or the nominating committee to place your name on the slate.

Nominating committee:

Brian Murphy - bmurphy@monumentcompanies.com

Thad Hatchett - astronomynut@sbcglobal.net

Doug Brown - ddbrown@iquest.net

The Pres

Correction

The picture of the Deer Lick Cluster attributed to Chris Deitz in last months Bulletin was an error. Chris new I was observing this and found a picture on a website. I thought he took it.

Upcoming Star Parties and Registrations

Illinois Dark Skies Star Party – October 6-9 2005 is the fourth year for the Illinois Dark Skies Star party (Oct. 6-9) at one of the finest state park facilities in the heart of the Land of Lincoln. We'd like for the Indiana Astronomical Society to be a part of what is turning out to be a great "observer's" event. Regular registration is \$45 per person, but for this year we are making a registration discount available for select astro groups. The IAS is one of those. Although we have had attendees from all over the country, we've never had anyone from your group to share our dark skies, good stories, tips, talent and information. This year, we are lowering registration fees for your members to \$35 per person for a group of five or more. We are lining up interesting speakers, have a great food menu to pick from and nice attendance prizes. This year, SmartAstronomy (www.smartastronomy.com) will be our star party vendor. Other events planned are "The Knowledge Bowl," an astronomy trivia contest with great prizes and a swap meet where you just might find that missing accessory you've been searching for or maybe a great deal on a second scope.

Winter Star Party – February 20-25, 2006- Registration has just started. Check 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.

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

From the Pres

Having just attended Astrofest and noting that a new detention facility and a rock quarry with their high intensity lights ruining the night sky, I feel it is time for us as a society and as human beings to protest in every manner we can to minimize this new form of pollution. It is easy to get the public to worry about PCBs in their drinking water but it is a lot more difficult to fight the expansion of light pollution. Folks think why are you worrying about trivial things when we need to be concerned about the big things such as global warming etc. Well, light pollution affects both us as astronomers in that we cannot see the night sky anymore but also us in that it uses a non renewable fuel and generates pollutants in the atmosphere. It takes seven tons of coal to generate the electricity to light one billboard! Try that on for size. There was a good article in *Indianapolis Monthly* recently that discussed the problems in Indiana. It was a good article with interviews of people from the IAS, IU, and Kevin Fleming of ICOLE. One point that Kevin brought out was that we need more legislation to control the outdoor lighting in Indiana. Several counties have taken the step to control outdoor lighting. It looked like we were beginning to make progress. Now we have a new attack. The headlines of the Johnson County *Daily Journal* two days ago screamed that Franklin was getting six new billboards that they did not want. They had rejected American Outdoor Advertising Company's application for new billboards in the Franklin area because they did not meet the code. They were too large. American Outdoor Advertising filed suit on grounds that the laws were unconstitutional in that they restricted free speech!!! I looked on the website and found they are using this argument all over the area. The Franklin council decided to settle and let them build the new signs. Probably they thought it would cost too much to fight. And what the heck. It is just a little more light. If

The Bulletin The monthly publication of the Indiana Astronomical Society

we sit back and just say, "Oh Well", they are going to run all over us. We can't all fit in Arizona. The same similar situation is going on at Prairie Grass! Talk to your county commissioners and council members. Don't let this get out of control. We thought we were making progress but I am thinking now we are getting a new challenge.

The Pres

Observer's Corner

There are several astronomical events occurring this month in October you may not want to miss. They include:

- a. lunar occultation of two naked eye stars
- b. two meteor showers
- c. lunar eclipse
 - a. On the night of Oct. 12-13, 2005, the Moon will occult the naked eye stars Epsilon Capricorni at 9:02pm EST and Kappa Capricorni at 12:18am EST. For more information, website of the International Occultation Timing Assoc. at: www.lunar-occultations.com/iota
 - b. The Draconid Meteor Shower occurs on the night of Oct. 7-8 and its radiant will be in the northwest sky.
 - c. On the night of Oct. 20-21 there will be a second meteor shower, called the Orionids. You can find more information at the website of the International Meteor Organization at: www.imo.net
 - d. Lunar Eclipse, Oct 17. This will take place a couple of hours before dawn, Oct. 17

Article by Mark Bradbury

Local School Events and Star Parties

Gerald Venne has accepted the position of Public Program Chairman. He will be responsible for coordinating Public Events for the IAS. Thanks Gerald.

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) 882-8055
E-Mail: JMPSR@Iquest.net

The Bulletin The monthly publication of the Indiana Astronomical Society

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)

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.

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.

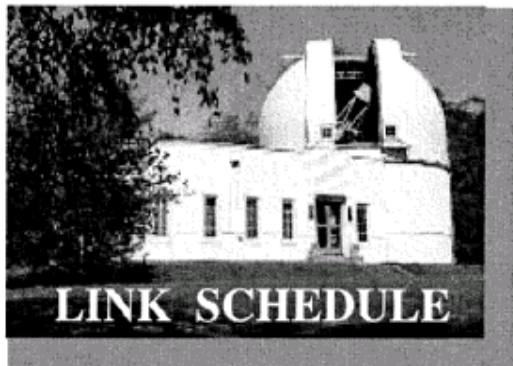
Note: The list server is for use of Society business. It can only be used according to the rules as outlined previously. Members abusing the service will be eliminated from the service.

Board Meeting – October 13, 2005 - 7:00 PM

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, walk around the building to the left as you are facing Starbucks. You will cross Starbucks outdoor patio seating area and you will come to the double door entry into the building (this is the south building façade).

The Bulletin The monthly publication of the Indiana Astronomical Society

These doors will be unlocked. Enter the lobby and ride the elevator (to your right) 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.



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 August:

Observing sessions - October 8 and October 22
Observer's Meeting - October 22
Link Training - October 22
General Meeting October 8
New Moon Meeting October 8

McCloud Activities:

None for this month.

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.

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.

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
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
lpastro@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>

The Bulletin The monthly publication of the Indiana Astronomical Society

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 1 317 826-2680

Library Committee Chairman

Ed Otto ecottol@comcast.net

The Bulletin The monthly publication of the Indiana Astronomical Society

October Calendar, 2005

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3 New Moon	4	5	6	7	8 Hog Roast General Meeting General Observing
9	10 First Qtr Moon	11	12	13 Board Meeting 7:00	14	15
16	17 Full Moon	18	19	20	21	22 General Observing Observer's Mtg Link Training
23	24 Last Qtr Moon	26	27	28	29	30
31						

The Bulletin The monthly publication of the Indiana Astronomical Society

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

The Bulletin The monthly publication of the Indiana Astronomical Society

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.