

Monthly Publication of the Indiana Astronomical Society

March, 2004
Volume 71, Issue 3
www.iasindy.org



The Bulletin

March General Meeting - March 13 7:00PM at the Holcomb Observatory

"DEEP IMPACT - Sub-surface Exploration of Comet Tempel 1"

Daniel Cervantes.

Comets are time capsules that hold clues about the formation and evolution of the solar system. They are composed of ice, gas and dust, primitive debris from the solar system's distant and coldest regions that formed 4.5 billion years ago. Deep Impact is the first space mission to probe beneath the surface of a comet and reveal the secrets of its interior.

The 820 pound Deep Impact spacecraft will collide with Comet Tempel 1. On impact, the crater produced is expected to be the size of a football stadium. Images from cameras and a spectrometer will be sent to Earth covering the approach, the impact and its aftermath.

Our talk will begin by reviewing the current knowledge of comet structures. We will then discuss the Deep Impact mission. We will finish by describing the opportunities afforded to amateur astronomers to observe Comet Tempel 1 using telescopes and the internet in real-time and near real-time as the mission unfolds.

Daniel is currently a physicist with the Tactical Software Branch at Crane Division, Naval Surface Warfare Center in Crane, Indiana. He has a Masters Degree in Physics from Purdue University, and previously taught Physics and Astronomy at IUPUI. Daniel was recently selected as a NASA/JPL Solar System Ambassador, and has been a member of the IAS for many years.

The Bulletin Moves!! The current bulletin can be found on the website www.iasindy.org in the "Upcoming Events" section of the site.

The Board has voted to move the current Bulletin on the website from the "Members Only" section to the open part of the website. We are an open society focused on teaching and developing an appreciation and love of our hobby; the science of Astronomy. We do not bar anyone from any of our functions and we currently hand out current Bulletins free to the public. There are

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two major reasons for making this change. 1) It would open us up more to our major focus of "Bringing Astronomy to the Public". We want the local public to know what we are doing and when and maybe draw more into the fold. If they see we have activities that are interesting, they will join us. Many societies throughout the country have their newsletters in open sections of their websites. 2) Making it easier to get the Bulletin on the website could reduce the number of hard copy Bulletins we have to mail each month. No more having to remember a password. We still have to provide a Bulletin to each member as part of their membership benefits so there will be hard copies for those without internet capabilities. The Board feels that making the Bulletin open to the public would not affect membership. Our feeling is that members come to gain association with others interested in their hobby. Please note this is not an attempt to make it easier to participate without becoming a member. The Board will actively monitor membership to see if this move has an adverse impact.

Work Day At the Link - All Hands Needed!

The Board has designated Saturday April 3 as cleanup day for the Link. We need help in getting the Observatory ready for our use this coming year. Work begins at 10 a.m. Bring tools, ladders, trimmers, chainsaws, weed eaters, and a lot of elbow grease. We plan to complete work on the little dome and the shed as well as a lot of trimming of the limbs and brush that grew up this last year. There will be a lot of cleaning in the observatory itself if you are not inclined to the outside work. We really need as many as possible to help out.

Meet Astronaut Jerry Ross! April 15th

To celebrate the Indiana 4-H Centennial, the Indiana 4-H Foundation will feature Hoosier natives Astronaut Jerry and Karen Ross at a fundraising reception on the evening of Thursday, April 15, in Indianapolis.

Jerry holds the record for the most time spent space walking (more than seven hours) and Karen is a food scientist employed by a NASA contractor to develop food products for space travel. The Rosses will be honored as Indiana 4-H Centennial Alumni during the event and will make short presentations.

To receive your personal invitation to this event please contact the Indiana 4-H Foundation office at 225 S. East St., Suite 760, Indianapolis, IN 46202, call 317-692-7408, e-mail mark@4h.org, or visit www.4h.org for periodic updates about this event.

Eagle Creek Park Stargazing Opportunities

March Eagle Creek Sessions March 31, 8-10:30PM

Article submitted by Jeff Patterson.

Eagle Creek Park continues to have programs throughout the year at the Eagle's Crest. Call 327-7148 to let them know you are coming. Registration is \$3.00. It is free to the IAS if you bring a scope for the public.

Directions to Eagle's Crest

1. Go west on 56th St. across the reservoir and past the golf course.
2. Turn Right on Raceway Rd 0.99 Miles
3. Turn right onto E CR 700N 0.11 Miles
4. E CR 700N becomes N Raceway Rd 1.14 Miles

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5. N Raceway Rd becomes Fishback Rd 0.24 Miles

New Members

The IAS would like to welcome the following new members:

Bradley Glenn Salem, IN
Gary A. Gibson Indianapolis
Scott Lewellen Indianapolis
Ed Otto Indianapolis
Ryan White Indianapolis
Brett Hansen Fishers
Mike Birch Indianapolis

You old members seek out these guys and show them the ropes. Get them involved.

Upcoming Star Parties and Registrations

NIAGfest/GreatCon - April 23-24 Warsaw IN

<http://clubs.kconline.com/was/niag.htm>

This is a great small, close star party focusing on speakers on Saturday. Generally observing is available on Friday and Saturday nights. Camping is \$5 and a warm cabin is \$10. Not a bad deal for a couple of days. I strongly recommend it.

Apollo Rendezvous - June 11-12 Dayton Ohio

Please keep checking back for the registration forms and for additional activities and speakers as plans are being made. Send an email to: rendezvous@mvas.org with your name and mailing address, to have a registration flyer sent when it becomes available.

Green Bank Star Quest - July 8-11 in W. Virginia

caacwy.org or KVAS.org

Indiana Family Star Party - August 13-15

WVAS has set the date for the annual star party at Prairie Grass Observatories. The IAS will be asked to help out again this year. More to come later.

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

Jeff

Winter Star Party 2004

We all had mixed feelings about the Winter Star Party 2004. It was pretty cloudy and windy early in the week. This was the 20th anniversary and the Southern Cross Society had gone to great lengths to make it a celebration. We had live music every evening and a free bar-b-que at the end of the week. This year eight of us from the IAS ventured to see the southern delights. We blew through rain from Atlanta to southern Florida but were met in the Keys by mildly cloudy skies on Monday. Man you can get sun burned on a cloudy day! Hey! A sunburn in February isn't bad! Monday night cleared out but the wind made imaging almost impossible. Two guys brought domes. They were smart. One had to hold onto the ole Dob to keep it from flying. Most were grumbling about the weather but I got three full nights of observing out of 5. I left on Saturday and I hear the observing Saturday night was awesome! Try that in Indiana. The imaging workshop by Tony Hallas and Don Parker

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and crew was excellent. All the big scopes were looking at the new nebula called McNeil's Nebula. I was able to see the horse head visually with a 24" Starmaster! I had never done that before It was worth the trek. Chris Dietz wound up with a nice Nagler eyepiece as a door prize. "Uncle Al" had a program where you could borrow any of his products and try them out on your scope. That was fun. This is a good party and I urge you to think about it next year. It is about 1200 miles to Summerland Key but it does break up the winter. It is not the darkest place in the world but the seeing is quite steady and the people are great.



Article by Jeff Patterson

Public Events

Article by Jeff Patterson

One of more fun opportunities as a member of the IAS is to go to various public events and share our hobby with the public. More and more schools are asking for our help to participate in their astronomy events. We need you!! You don't have to be an expert; just willing to take time and show someone the wonders of the heavens. If you have interest, please contact Bill Conner or me.

We had a great event at Lakeside with 7 telescopes and about 300 kids. The kids and parents were very interested. You don't have to be an expert. Come out to our next event at Fishback Creek Academy on the west side.

[Upcoming events](#)

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Eagle Creek Park	See articles in Bulletin
Fishback Creek Academy	March 9
Sunnyside Star Party Lawrence TSP	April 15
Decatur Central High School	April 16
Franklin Library	April 29
McCloud Park	See articles in Bulletin

Messier Marathon

March is the month to attempt to see as many of the Messier objects as one can in one night. Traditionally we have a small contest as to how many objects are observed. This year we will meet at the Link two nights (March 20 and March 27). If you like, team up with someone and go for it. I will provide a list of the objects in the order best suited for observing. Awards will be presented at the April General Meeting to the winners. Categories include with and without computer help and a category for the big 36".

Observer's Corner

Article by Jeff Patterson

Comet C/2002 T7 (LINEAR) is approaching Earth and brightening every day. It's not yet a naked-eye object, but the 7th-magnitude fuzzball is easy to see through backyard telescopes. The comet lies not far from brilliant Venus in the western sky after sunset.

For the next three months, the comet will continue to brighten as it nears Earth. May 19th is the date of closest approach (0.27 AU). At that time C/2002 T7 might glow brighter than a 1st magnitude star--easily seen with the unaided eye. (Note: there is considerable uncertainty about how bright this object will become.) In May you'll have to be in the southern hemisphere to see it easily. Now is the best time for northern hemisphere observers to look, before the comet plunges south. Visit Spaceweather.com for more information and images.

Article copied from Spaceweather.com

McCloud Nature Park - A Dark Site for Observing

McCloud Park Observing For March - weather permitting -March 19, 2004

McCloud Nature Park is located in Hendricks County. It is 230 acres of Nature!!! The interpretive naturalist has requested that we come out for new moon and show the sky to the public.

It's only 30 miles from the intersection of I-465 and I-74 Off of SR-75. Curious? Come and join us on New Moon Friday.

Call, or e-mail Mike Wolford for further information. 317 445-2173 e-mail: mwolford@crtc.com

New Astronomers Group "Constellations"

This Months Program will be held March 27 at 7PM at the Link. Note if weather is bad (Cold) call John May to confirm the program will be presented.

Article submitted by J. Philip May

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The New Astronomers Group (NAG) is a program designed to teach the novice amateur astronomer and even for those experienced astronomers who may want a refresher course in the basics of astronomy. The NAG meets in the early evening of the 4th Saturday of every month at the Goethe Link Observatory. The classes start at 7pm in the Link auditorium. During the winter months, if the snow is deep and/or the temperatures have dropped considerably below freezing, the event will be canceled. To confirm program schedules please contact J. Philip May, the NAG program coordinator, at motordrive@msn.com or 317-831-8387. If any IAS member or new IAS member has a suggestion for a meeting topic, please contact Mr. May. Also, experienced IAS members are encouraged to participate as an instructor for any choice of the following NAG programs - please volunteer your time and expertise. This should be a fun event as well as being instructive for the novice astronomer.

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.

To place an ad contact:

Bulletin Editor

Jeff Patterson

1780 S. Morgantown Rd.

Greenwood, IN 46143

317 882-8055

e-Mail: JMPSR@Iquest.net

Meade Pictor 216XT CCD w/Homeyer flip mirror, never used, \$400 (\$895 new)

Larry Phillips, 317-230-2043 daytime, 317-729-2447, after 5:30PM

Celestron S-80+ 80mm Dia. spotting scope/guide scope \$150.

Larry Phillips, 317-230-2043 daytime, 317-729-2447, after 5:30PM

60mm Dia, 540mm focal length guide scope \$100.

Larry Phillips, 317-230-2043 daytime, 317-729-2447, after 5:30PM

[Astro Ads Continued](#)

For Sale: Celestron C-5 with tripod, astromaster(installed), power pack/inverter, cases, filter, eyepieces, and lots more. \$1500 Call: Paul at 317 888-1605

For Sale: Orion 120st refractor with mount and tripod, dual axis drive. Less than a year old.

Contact: Jerry Vessels at jvessels@iquest.net

For Sale: Celestron 8" Dobsonian, metal tube \$400 Contact Jeff Patterson JMPSR@Iquest.net

For Sale **Price Reduced:** 5" f5 refractor, Jaegers Objective. Orion Skyview Deluxe EQ with Accutrack SVD DC Motor Drive (New) 17mm and 12.5mm Plossl eyepieces plus Barlow 3X \$600.00 (OBO) Jerry Barnett (317) 888-8945

For Sale: **Price Reduced** Giro GR-2 Alt/Az mount. Capacity of 25 lbs. on each side. Like new condition. Mount comes with 4kg. counterweight, SS counterweight shaft, and carrying case. \$275 Contact: Jim Rinehart 317-881-3475 -- jrine@iquest.net

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For sale: Starlight Express MX7C one-shot color CCD camera, STAR2000 self-guider, and AstroArt software. \$1300. srussell@iquest.net

Loaner Scope Program

Did you know you can borrow a scope 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 scope 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 but Brian Murphy can arrange for your pickup and training as John recovers from his injuries. This is a great way to see what you want to use. We have several scopes to loan. Contact Brian Murphy at bmurphy@monumentcompanies.com

List Server Now online - Don't be left in the cold - Sign up!

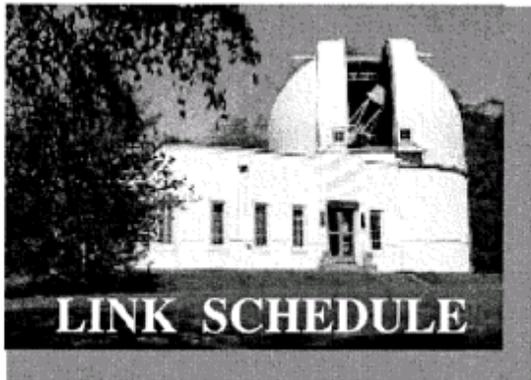
This service is our main communication tool. The list server is in the "Members Only" section of the site and is accessible only by IAS members. Make sure we have your e-mail and you have access for late updates to events and functions.

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.

March Board Meeting – March 18, 2004 - 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). 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.

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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: J. Philip May (317)831-8387. 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
J. Philip May: 831-8387
Tom Borlik: 849-4113

Gary Schoppenhorst: 297-1405
Brian Murphy: 841-8511
Dave Williams: 769-7430

Link Activities for March:

New Moon Group Meeting March 20
Observer's Meeting March 27
Messier Marathon March 20, 27

New Astronomers March 27
Link Training March 27

Bulletin Stats

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

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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: Larry Phillips 317 729-2447

Treasurer: Dave Timmerman 317844-9431

Board of Directors

Gary Schoppenhorst (2006)

Gerald Venne (2006)

Thad Hatchett (2004)

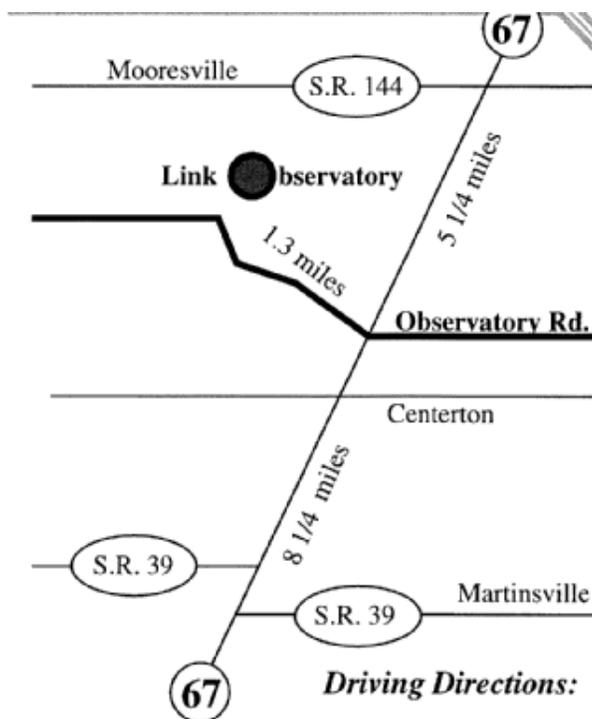
Doug Brown (2004)

Bill Conner (2004)

Marion Hakes (2005)

John Molt (2005)

Map to the Goethe Link Observatory



Driving Directions:

The Link Observatory is located 5 1/4 miles south of the S.R. 67 & S.R. 144 interchange in Mooresville. A diamond shape hi-way transportation sign will warn you of the approaching Observatory Road intersection. Turn right (west) up the steep hill and continue 1.3 miles to the observatory, where there is a one-lane drive on your right named: Observatory Lane. The driveway to the observatory is immediately to your right when you make your turn onto the lane. It's easy to miss; watch your odometer.

March Calendar, 2004

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6 Full Moon
7	8	9 Fishback Creek Elementary SP	10	11	12	13 Gen. Mtg 7:00PM Last Qtr Moon
14	15	16	17	18 Board Meeting 7:00	19	20 New Moon GP Messier Marathon New Moon
21	22	23	24	25	26	27 NAG Meeting Observer's Mtg Link Training Messier Marathon
28 First QTR Moon	29	30	31 Star Party Eagle Creek Park			

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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 (\$20.00)	
Annual Student Membership (\$10.00)	
Astronomy Magazine Renewal (\$29.00)	
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: Dave Timmerman, Treasurer
780 Woodview North Drive
Carmel, IN 46032

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 articles for new members and may be used by the society to match people with similar interests.