

# THE W. A. S. P. NEWSLETTER

The Warren Astronomical Society paper

P.O. BOX 1505  
WARREN, MICHIGAN 48090-1505

<http://www.warrenastro.org>

More contact information

<http://www.warrenastro.org/was/officers.aspx>

## 2010 WAS Officers

President: Gary M. Ross [president@warrenastro.org](mailto:president@warrenastro.org)

1<sup>st</sup> VP: Jon Blum [firstvp@warrenastro.org](mailto:firstvp@warrenastro.org)

2<sup>nd</sup> VP: Bob Berta [secondvp@warrenastro.org](mailto:secondvp@warrenastro.org)

Secretary: Therese Oldani [secretary@warrenastro.org](mailto:secretary@warrenastro.org)

Treasurer: Jonathan Kade [treasurer@warrenastro.org](mailto:treasurer@warrenastro.org)

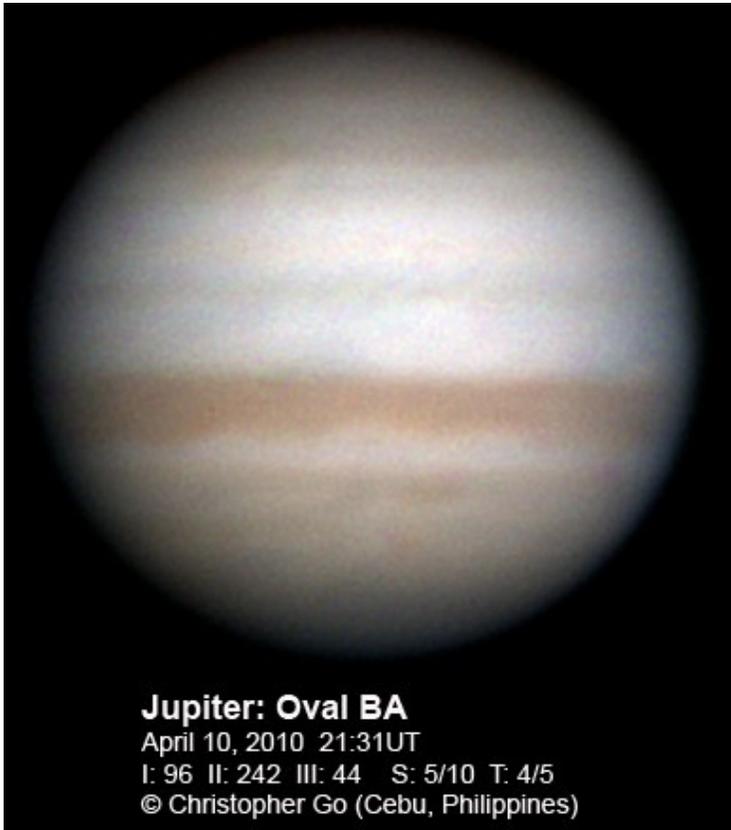
Publications: Stephen Uitti [publications@warrenastro.org](mailto:publications@warrenastro.org)

Pub. Outreach: Diane Hall [outreach@warrenastro.org](mailto:outreach@warrenastro.org)

Entire board: [board@warrenastro.org](mailto:board@warrenastro.org)

### Astro Chatter

Jupiter is a happening place! In July 1994, the comet Shoemaker-Levy 9 bits slammed into it and left a number of scars. Then, on the 19<sup>th</sup> of July, 2009, Antony Welsey imaged another scar. In April, 2010 as Jupiter emerged in the pre-dawn sky from behind the Sun, Christopher Go's first Jupiter image of the season shows it missing it's southern belt. Hopefully, Jupiter will be able to keep his pants on, and not Moon us. At least the belt buckle (the Great Red Spot) is still there. And the GRS is now easier to see, as there is better contrast.

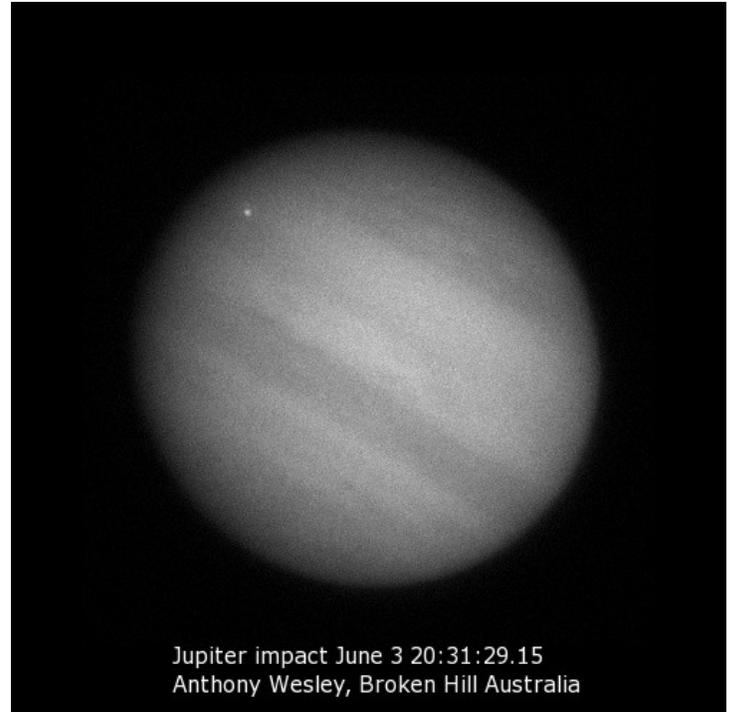


**Jupiter: Oval BA**

April 10, 2010 21:31UT

I: 96 II: 242 III: 44 S: 5/10 T: 4/5

© Christopher Go (Cebu, Philippines)



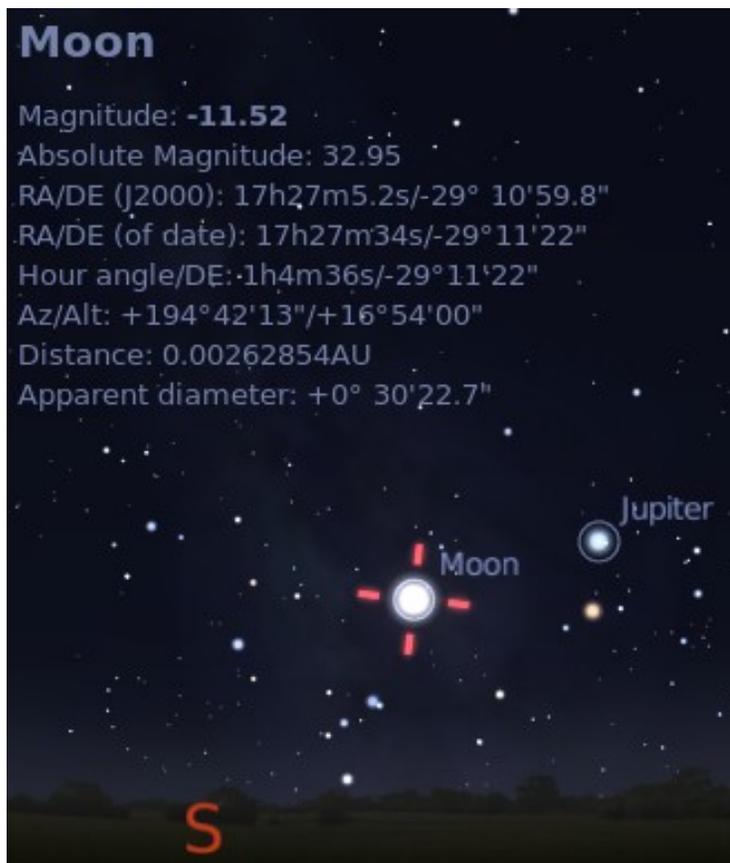
Jupiter impact June 3 20:31:29.15  
Antony Wesley, Broken Hill Australia

The excitement continues as on June 3<sup>rd</sup>, Antony Wesley and Christopher Go both imaged an impact in progress on Jupiter with their video cameras. If all you have is a single still, you can dismiss such an event as camera noise or a cosmic ray event (in the camera). However, with multiple images, it's clear that the spot grows brighter and then fades. And with two independent cameras at the same time, the event is unquestionable. Unlike last summer's impact, this one did not leave a visible scar. So the only way to have seen it was to have imaged it at the time, which professionals never have time for. Clearly, amateur astronomers rock! - S. Uitti

## Moon Over Madison Heights

It might as well have been in south Georgia, the evening of 22 August 2007. The air was thick to sight and smell as the last light left the west at 22.00 E.S.T. I was crossing that purgatorial feature of the North American metropolitan landscape -- the parking lot of a big box store (where two industrial establishments once stood) -- when I actually paused for an unnatural sight.

The gibbous Moon was dull and mauve. Extinction was brutal. More to the point, the Moon was very near meridian, but how very, very close to the southern horizon she stood! One could almost believe I was looking east at the rising, but no, this was at culmination. The Moon's position in the sky and orientation bordered on the unreal. Jupiter, the only other object visible in the south, was to the west and above her.



Once again the Metonic Cycle was at work. The nodes of the lunar orbit with the Plane of the Ecliptic regress completely around the Celestial Sphere every 18.6 years. Moreover, the Moon's orbit is inclined to the Ecliptic, some over 5°, so every eighteen to twenty years the Moon can be found well to the south of that great circle in Sagittarius or well above it in Gemini. The latter is tough to notice since high up there are no points of reference except the constellations, but when the Moon stands outside the southern Ecliptic the observer has a familiar metric -- the horizon. The first time I noticed this effect,

and knew what I was looking at, was in the summer of 1966 when the July or August full Moon seemed too close to the horizon from southern Michigan. To repeat: the Metonic Cycle, after Meton, the first at least in the west to describe the motion.

Now for the numbers. The next evening was the Discussion Group of the WAS, to which I brought cheap pizza but even then could not get agenda time. One of the Society's more notorious members got out his little hand thingie with more computing power than ENIAC and UNIVAC combined, and told us the declination was bang-on -29°. That number struck me as about right, as low as the Moon can go on the Celestial Sphere. Now, my latitude was 42° 30'. The arithmetic plays out (not "do the math"), the Moon at 20h E.S.T. was 18° 30' high on the more-or-less meridian, since I do not know the exact transit time.

If this was an arresting sight from south-eastern Lower Michigan, from the typically over-specified parking lot of a cookie cutter store, let the magic carpet of the mind take hold: go sailing off with Peter Pan or Mary Poppins . . .

In the early summer of 1961 my family went on a 'round Superior trip using the spanking new Trans-Canada Highway. What a departure from the old, temporary route via Kapuskasing, but that is another story. We spent the night at some campground west of Marathon very close to the water, Neys or Rosspport (!) Provincial Park. What a fine moonlit night, and with my brother's 4.25" reflector to boot. I recall how *low* everything was in the south. Jupiter and Saturn in those days were summer planets, and Sagittarius and Scorpius were scraping the horizon for this boy used to the torrid south. What would the Moon have looked like "way up" there last August 22? 'Zounds! But even though Ontario sorts think they are at the end of the world at Marathon, and Michigan lads think Houghton is Ultima Thule, try someplace really "up nort'," like . . . Warsaw or Swinging London, as we said for some bizarre reason in the late 1960s. Warsaw is at 52°, 9½° more latitude than Swinging Madison Heights.

Nine degrees at transit, repeat **NINE DEGREES** up at Warsaw -- although to be a spoiler that fabled city is six time zones to the east, so the Moon had not arrived at nadir at close of twilight. She moves a diameter every half-hour. Alright, say ten degrees elevation. We should hope they had a clear summer night in middle Poland with long, long shadows from a Moon just peaking over the southern horizon before sinking too quickly again. Old Polish song: "Oh, how lovely is the evening, is the evening. [Key change] Oh, how lovely . . ."

Not to look up is to look at the ground. - Gary Ross



### The SWAP SHOP

This column is for those interested in buying, trading or selling. Ads run for six months. The month and year the ad will be removed is shown. Submit ads to Stephen Uitti, 313 389-5609 [publications@warrenastro.org](mailto:publications@warrenastro.org).

**FOR SALE:** Celestron Optima 2000, an 8" Schmidt-Cass go-to scope. It's in good shape, works well, and has fine optics. It comes with a hard case. Asking \$900. Contact Bob Zinke, 586-264-0884, email: [r1d3z@yahoo.com](mailto:r1d3z@yahoo.com) [6-2010]

**FOR SALE:** Blaine McCullough's 13" Telescope! Mary Lou McCollough wishes to find Blaine's telescope a good home. Hand built by Blaine and Steve Greene, beautifully crafted truss dob has excellent optics. Finder scope and telrad included. \$1000 or BO. Contact Bill Beers for details at [BEEZOLL@AOL.COM](mailto:BEEZOLL@AOL.COM) or 586-321-8207 [7-2010]

**FOR SALE:** A Meade Moto-focus for SCT's. Attaches to your current focuser knob, uses hand control to operate functions. Designed for a "classic" Meade scope, but may work with newer models. Asking \$ 10, includes mounting bracket and screws. Interested: [Saxon1066@comcast.net](mailto:Saxon1066@comcast.net) or Fred Judd: (586) 489-0245 after 4 pm [10-2010]



### 2010 Stargate Observatory Open House

**Dates:** Apr 24, May 22, June 19, July 17, Aug 21, Sept 11, Oct 16, Nov 13, Dec 11

### Observatory Rules

1. Normal closing time will depend on events, weather, and other variables.
2. The observatory may be closed one hour after opening time if no members arrive within the first hour.
3. Contact the 2<sup>nd</sup> VP for other arrangements, such as late arrival time. Call 586-992-0498.
4. An alternative person will be appointed to open the observatory if the 2<sup>nd</sup> VP cannot attend a scheduled date or opening time.
5. Members may arrive before or stay after the scheduled open house time.
6. Dates are subject to change or cancellation depending on weather or staffing availability.
7. An email will be posted no later than 2 hours before starting time in case of date change or cancellation.
8. It is best to email the 2<sup>nd</sup> VP up to 2 hours before the posted opening with any questions you may have. Later emails will not be receivable.
9. Generally, only strong rain or snow will prevent the open house... the plan is to be there even if it is clouded over. Often, the weather is cloudy, but it clears up as the evening progresses.

-Bob Berta, 2<sup>nd</sup> VP

### WAS Club logo wear at WAS meetings



(Photos and modeling by Jon Blum)

Diane Worth, [dianewsky-night@yahoo.com](mailto:dianewsky-night@yahoo.com) or 248-980-7832 sells club logo clothing (hats, shirts, sweatshirts, jackets). Stephen Uitti brings a catalog of available items to meetings.

## Astronomical Phenomena - June 2010

Day	Event
4	LAST QUARTER
12	NEW MOON
15	Venus 3.7°N of Moon
15	Moon at perigee
17	Mars 5.3°N of Moon
19	FIRST QUARTER
21	Solstice
25	Moon furthest South (-25.0°)
25	Pluto at opposition
26	FULL MOON (Eclipse for Pacific)
28	Mercury superior conjunction
30	Neptune 4.3°S of Moon

### WAS 2010 Upcoming Presentations

7 June	Jim Van Prooyen	Amateur Radio Astronomy You Can Do
17 June	Dave Bailey	White Dwarfs
5 July	Gary Gathen	Librations of Moons
15 July	Bob Berta	NASA - Lost in Space?

### Astronomy Events Calendar

June 8-13 - Bill's Cadillac West spring star party  
 July 10 – WAS mutli-club Picnic!  
 August 7<sup>th</sup> – FAAC multi-club picnic!  
 August 5-8 - Stellafane in Vermont.  
 August 21 Seven Ponds multi- Summer Cookout!  
 September 17-18 - Astronomy at the Beach.  
 October 2-10 - Okie-Tex star party: Oklahoma.  
 October 7-10 - Hidden Hollow star party at Warren Rupp Observatory in Ohio.  
 October 7-10 - Great Lakes Star Gaze.  
 November 2-7 - The Cadillac West fall star party  
 December 16 – WAS Annual Banquet & Presentation - Mark John Christensen

### 2010 WAS Meetings

#### Cranbrook Meetings: 1<sup>st</sup> Mondays

June 7, July 5, Aug 2, Sept 13 (not Labor Day), Oct 4, Nov 1, Dec 6.

#### Macomb Meetings: 3<sup>rd</sup> Thursdays

June 17, July 15, Aug 19, Sept 16 (Same week as Cranbrook), October 21, Nov 18, Banquet Dec 16



## The WASP

The Warren Astronomical Society Paper (WASP) is the official monthly publication of the Society. New issues of the WASP are available online at the <http://www.warrenastro.org/> website.

Requests by other astronomy clubs to receive the WASP, and all other correspondence should be addressed to the Publications Director, Stephen Uitti, at [publications@warrenastro.org](mailto:publications@warrenastro.org).

Articles for inclusion in the WASP are strongly encouraged and should be submitted to the editor by the 24<sup>th</sup> day of each month. Any format of submission is accepted, however, plain text files are the easiest form to use. Most popular graphics formats are acceptable. The preferred method of submission is electronically via email with attachment to the editor. Alternative submissions include printed form delivered in person, or via US mail. Disclaimer: The articles presented herein represent the opinions of the authors and are not necessarily the opinions of the WAS or the editor.

The WASP editor reserves the right to deny publication of any submission. *-Stephen Uitti*

### New Short Talks at Cranbrook

At the Cranbrook meeting of the Warren Astronomical Society on Monday, June 7, we will start a new program. We will have a short (10-15 minute) more basic talk at some Cranbrook meetings. This will be in addition to our standard full-length (45-60 minute) longer and more in-depth talks that will continue at Cranbrook and Macomb meetings. If you would like to present either a short talk or a full-length talk at a future meeting, please email Jon Blum at [firstvp@warrenastro.org](mailto:firstvp@warrenastro.org). *-Jon Blum, 1<sup>st</sup> VP*

### Oakland Astronomy Club newsletter

<http://oaklandastronomy.ulmb.com/oacnews.html>  
 Clear skies, *- Bill MacIntosh*

## WAS Board Meeting, May 3, 2010

**Officers:** Gary Ross, Bob Berta, Jon Blum, Diane Hall, Stephen Uitti, Jonathan Kade, Therese Oldani

**Guests:** Ken Bertin and Brian Klaus

### Officer's Reports:

**1<sup>st</sup> VP:** Jon Blum reported that the schedule for presentations is filled through February 2011. The topic presentations are various and sometimes change. Be aware of updates.

September panel on Manned or Unmanned space exploration originally scheduled for the 16th has moved to the 13th at Cranbrook.

**2<sup>nd</sup> VP:** Astronomy Day on April 24th at Stargate was a success. During the day, 150 people came through. A large number of children and families were able to visit the crafts provided by the park and take part in presentations and demonstrations put on by club members Bob Berta, Ken Bertin and Larry Phipps. Night weather was not as cooperative.

Phil Moore from the scouts, offered his company to provide flooring for the observatory. We are in contact with him and availing ourselves to this great opportunity.

Gary asked about Dome security during weather and rain.

**Treasury:** 32 membership renewals received: \$717.44.

Six new club members this month.

Purchase of ORION SkyScanned 100mm table top reflector.

**Secretary:** Snacks for meetings by sign up. Therese will do email reminders. May 20th Jonathan Kade and Therese Oldani will provide,

Oriental Trading has provided a check to use for future purchases.

\$50 Lumicon gift certificate will be raffled today.

Jon Blum donated Celestron hat and two pins for other prizes today. He also donated two Celestron t-shirts for summer picnic raffle.

**Publications:** WASP to go out as articles are received. Article preference is to fit on a page. Gary Ross sends out paper copies to requested members within 3 days of Monthly publication.

**Outreach:** April 24th Astronomy Day was a success at three locations. Great turn out at Metro Beach with speakers from EMU, Wayne State and Ford Club.

Saturday May 1, Clarkston, DISCOVERY day. GREAT success. Warren club was asked to participate in Oakland upcoming events.

**New Business:** Much discussion on Insurance for STARGATE and inventory. This is in response to a \$600 increase per year. Issues are Liability, the DOB, other scopes and inventory and the building. Ken Bertin is looking into risk and liability.

Meeting adjourned at 7:29pm - *Therese Oldani*

## July Talks

On July 5<sup>th</sup>, Gary Gathen will give his *Librations of Moons* at talk Cranbrook. This slide show will present definitions and descriptions of the various librations of Earth's moon and their effects on the amount of the moon's surface visible from Earth. It will also briefly describe librations of many of the other solar system's moons, many of which don't exhibit librations.

WAS VP Bob Berta will give a talk on July 15<sup>th</sup> entitled *Lost In Space: The Fall of NASA and the Dream of a Space Age*. He will cover some of the history of NASA (and the Russian space program), where they went wrong (and right) and where the future of manned and unmanned space exploration might go. He expects the talk to be somewhat controversial, and so he is planning the presentation as an interactive talk. Bob hopes to get comments and arguments from the audience for both viewpoints of his talk. This may provide some spirited debate!

## WAS General Meeting May 3rd

Meeting opened at 7:32pm, 38 present.

**President:** Introductions were made and Jon Blum gave visitors an informational hand out. One of our veteran members of 49 years in the WAS is not well. After two years of battling cancer, Larry Kalinowski is in home care with his family. (Since this meeting, Larry passed on May 4th.)

**1<sup>st</sup> VP:** Jon Blum reviewed an overview of presentation's structure per each meeting in every month. Jon would like members to email him at firstvp@warrenastro.org to volunteer to give a short or a full-length presentation at any future meeting. The meeting with a panel discussion about manned versus unmanned space exploration has been moved to September 13 at Cranbrook.

Jon introduced and welcomed our guest speakers for tonight from Grand Rapids, from James Veen Observatory.

**2<sup>nd</sup> VP:** Bob Berta reported to the general members on the success of Astronomy Day at Stargate, and thanked all the volunteers.

**Secretary:** There will be a Lumicon raffle today for \$50 gift certificate. A \$25 Lumicon gift certificate will be raffled on May 20th at Macomb.

**Treasurer:** Reported on cash flow and the ongoing work of insurance to cover Stargate.

**Publications:** April WASP published. During break, items for sale: glow in the dark tape, Warren logo stickers, and other items.

**Outreach:** Astronomy Day on April 24 at Cranbrook, Metro Beach and Stargate a great success for all. Diane thanked the volunteers by name.

4-H Discovery Day, Oakland County Fair Grounds a great success on May 1st. Thanks to Cervanek and his portable planetarium.

July 10 will be our annual picnic.

**Solar:** Bob Berta showed an image on the large screen taken on Feb 8, 2010. Brilliant image!

**Special Interest:** Gary Gathen reported on the Discussion group. Most evenings are on science videos, meeting fourth Thursday from 8-11pm. Contact him for directions.

**Observation:** Stephen Uitti reported Mercury observation from two weeks ago. Gary reported on a spectroscopic binary in Leo observation.

**In the News:** Among the recent space news, a video clip from NASA's Solar Dynamics of a prominence of the sun March 30th. And, Bob Berta showed a recent image from HUBBLE titled "Mystic Mountain."

### Star Parties:

Cadillac Star Party to be held June 8 - June 13 hosted by Bill Beers.

Second party to be held in Nov 2-7

Astronomy at the Beach/Kensington - September 10-11

Great Lakes Star Gaze/Gladwin - October 7-10

**Snacks:** 8:45pm provided by Steven Bagette.

**Presentation:** Guest Speakers, Jeff Dickerman and Dell Paielli from the Grand Rapids Amateur Astronomical Association. Two separate talks 1) Jeff's company, Optec, and 2) Light Curves of Asteroids. By measuring the change in the magnitude of an asteroid as it spins on its axis, the spin rate, direction of spin, and the spin orientation can be determined. Through collaboration with Dr. Larry Molnar at Calvin College in Grand Rapids, we are just beginning to get involved in this fascinating area of astronomical research to which amateurs can greatly contribute.

Meeting adjourned 10pm - *Therese Oldani*

### June Talks

The short talk on June 7 was *Dust from a Comet's Tail* by **Fred Gluckson**. Fred is a retired automotive engineer who also worked in computing and consulting. This is his first talk to our club, but he is already scheduled for a longer talk on another topic next year.

*Continued next page...*

Our main speaker Cranbrook on June 7 was **James Van Prooyen** from Grand Rapids, speaking on *Radio Astronomy You Can Do*.

The presentation on radio astronomy covered many things that can be observed with radio astronomy. This included observing the Sun, Geomagnetic Storms, Gamma Ray Bursts Meteors and Pulsars. Sources for equipment and software were also presented.

James Van Prooyen's research has been directed to the following areas:

- New computer algorithms that will allow smaller radio telescopes to do the work of larger radio telescopes. This work has allowed the development of new methods of Pulsar observation in radio astronomy.

- Use of Vary Low Frequency Radio to observe near earth event such as meteor showers, spacecraft re-entry events, and Gamma Ray Bursts.

- Development of new antenna system for radio astronomy.

**Dave Bailey's** June 17<sup>th</sup> talk is *White Dwarfs: Smaller than the Moon?* at the Macomb meeting. Bring your questions: Dave claims he can answer any question about astronomy, but he doesn't guarantee the answer is right.

White dwarfs are just about the simplest and quietest of all stars, so long as you leave them alone. But if you put one in a closed binary system, things can get very complicated. The resulting cataclysmic variable star can vary in at least two dozen different ways, many of which are not fully understood. Obviously we can't study all those in one meeting.

### **Treasurer's Report**

While it wasn't the amazing month that April was, it was a good month for the treasury. We increased our savings by \$265.01 for the month, added a new member, renewed six memberships (one a member

who hadn't renewed in four years), and started or renewed two magazine subscriptions.

### **Members**

Welcome to new member Sai Rajagopalan, and thanks to him for running a club telescope at his first Stargate visit! Many thanks to everyone who renewed their memberships.

### **Insurance**

We're getting near the end of our insurance discussion, but we're not quite there yet. We hope to have it worked out by the end of the month.

### **Federal Tax-Exempt Status**

Still no real progress on this, but once the insurance is worked out we should have bandwidth to move forward at last.

### **Membership Cards/Name Tags**

We've started to move on this again, with the assistance of Brian Thieme, and hope to get these going by the end of the month. The membership handbook will be next on the agenda.

### **Donations**

We took in a whopping \$124 from members in donations over the month. I think we can call the gift certificate raffles a success!

### **Details**

We had credits of \$381.91 and debits of \$92.70 for the month. We have \$199.14 in cash, \$60 in uncashed checks, and \$5060.76 in the bank.

- Jonathan Kade

### **Seven Ponds Astronomy Club:**

#### **Open Invitation**

The Seven Ponds Astronomy Club extends it's invitation to the Warren Astronomical Society members to our monthly meetings. Our club website is: <http://bhmich.com/sevenpondsac/> and has all the information about our upcoming meetings, maps to Seven Ponds Nature Center, etc. Please let me know if you might be attending the meetings so that I can make appropriate plans to handle the expected crowd. If you have any questions, please contact me.

- John Lines