Hamilton Amateur Astronomers

Event Horizon

September 2006 Volume 13 Issue 10

FELLOWSHIP UNDER THE TARPS

compiled by Glenn Muller

For many astronomers Starfest is the most anticipated event of the year, and with good reason. Dark skies, good facilities, a great program, and excellent organization make this star party the complete package. Unfortunately, for Starfest's 25^{th} anniversary, Mother Nature decided to toss in a little "extra". Read on to find out how the week unfolded.

A Starless Starfest Report 2006 by Mike Spicer

Wednesday 23 August:

I spent all day packing up a tent, 4 telescopes and 4 cameras for use at Starfest. Gassed up the car and fit everything into it (increasing air pressure in the tires).

Thursday 24 August:

Woke up late, checked the weather (suddenly rain is predicted at Starfest for Thurs-Fri-Sat! What happened?). Drove to Mount Forest, checked into a motel, then drove to Starfest. Was hailed by HAA members who had saved room for a few latecomers; unpacked tent under very cloudy skies.

Observing: saw Lyra briefly; slept comfortably at motel during a very humid, rainy, night.

Friday 25 August:

Weather: overcast, rain. Woke up late but very well rested. Eschewed a rainy Starfest, looked at stars on Starry Night Pro and watched movie "Run Silent, Run Deep" (lots of water) instead. Almost set up telescope inside motel room to watch it slew around. Missed an exciting game of Astro-trivia at Starfest.

Saturday 26 August:

Up very early, observed the sun briefly, drove to Starfest to visit with many cold, wet astronomers who had tried to sleep in cold, wet tents. Saw the sun briefly. Packed up my tent and stuff during the sunny dry spell. Talked Tim P. into not leaving Starfest right away.

Chatted with HAA members, checked out the store booths but bought nothing (one booth near the POD display was completely devoid of goods to sell, maybe it isn't scheduled to be open on Saturdays). Found the POD display and stood inside it - alas, there was no dome installed. Attended Terry Dickinson's talk on what photos you can get from Australia or Yarkers, using a million dollar digital SLR. Sat with HAA members who ate entirely too much at the Starfest dinner buffet.

Observing: saw Glenn win a telescope at the door prizes, then back to the motel in a downpour.

Sunday 27 August:

Weather report predicts the cloud will break and we'll have clear skies starting the day after Starfest (thanks). Drove home from Starfest in the rain and unpacked all the equipment. Resisted the urge to set up a telescope in the office to watch it slew around.

I have decided not to register early for future Starfests. If the Starfest weather is good, registering at the last minute only costs $10 more than registering far in advance, but you have the option of not going if the weather looks bad.

Jackie's Starfest by Jackie Fulton

Arrived at Starfest Friday during a break in the unrelenting rain. To set up a tent and camp for the first time, in this, was to say at the very least, disheartening. The reports showed no sign of reprieve. The rain continued its torrential pounding, but as time passed a change of spirit began to evolve. So it came to be ....Adversity had brought Opportunity.

Listening, you could hear talking and outbursts of laughter drift over the canvas community. There were no longer the "haves" and the "have nots" or the "wanton". Delivered from "aperture envy" we were "just astronomers" one and all. So it became a weekend of the storytellers: lectures, experiences, advice, hopes, and laughter. Astronomers wedged elbow to elbow huddled under leaking canopies, sharing. Soaked astronomers passed and exchanged a nod, a smile, a chuckle and shook their heads. Acknowledging, saying it all, without saying a word. Strangers becoming friends.

And there were "stars" alright. They shone with a magnitude blinding even to the unaided observer. They were the members of the NYAA. Each and everyone outstanding, responding to this facilitators nightmare with absolute grace under fire. How disheartened they too must have been after so much time and preparation. But they never gave up and they carried on.....and oddly so did we.

cont'd on page 3 ...

Meeting space for the Hamilton Amateur Astronomy club provided by
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Email Reminder notice

We send email reminders before each meeting which describes the location, time and topic of the general meeting.
If you're not on the list, make sure that you receive your reminder by sending a note to:
`publicity@amateurastronomy.org`

An Offer

Thinking of buying your first telescope but wondering what kind to get? Before you buy, consider this offer from Mike Spicer: a "loaner" 5 inch telescope with electronic alt-az controls. The scopes are lightweight, easy to set up and very easy to use. Mike is offering newer members of our club one of these telescopes to try out for a month or so. Interested? You can reach Mike by email at `deBeneEsse2001@AOL.com` or by phone at (905) 388-0602.

Articles submissions

The HAA welcomes your astronomy related writings for the Event Horizon newsletter. Please send your articles, big or small, to:
`editor@amateurastronomy.org`
The submission deadline is two days before each general meeting.

HAMILTON AMATEUR ASTRONOMERS

Event Horizon is a publication of the Hamilton Amateur Astronomers (HAA).
The HAA is an amateur astronomy club dedicated to the promotion and enjoyment of astronomy for people of all ages and experience levels.
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HAA Council

PO Box 65578, Dundas, ON L9H 6Y6

Web: ..... amateurastronomy.org

General Inquiries:
secretary@amateurastronomy.org ..... (905) 575-5433

Membership Inquiries:
membership@amateurastronomy.org

Meeting Inquiries:
chair@amateurastronomy.org ..... (905) 945-5050

Public Event Inquiries:
publicity@amateurastronomy.org ..... (905) 945-5050

Binbrook Observing Inquiries:
observing@amateurastronomy.org ..... (519) 647-0036
DeBeneEsse2001@aol.com

Newsletter Inquiries/Submissions:
editor@amateurastronomy.org

Submissions to the web site or newsletter are welcome, and may be edited for size & content.

... cont'd from page 1

Make no mistake, it truly was exactly that, wet and cold and bleak and unyielding.....but the spirit of fellowship did not falter. It held steadfast.

In the upcoming year I will not hesitate to pre-register for Starfest. Why? The NYAA will need our support next year, more so, than ever before. After all.....isn't that what fellowship is really all about?

The Soggy Bottom Boys (and Girls) by Doug Welch

The weather predictions thrashed back and forth in the days before StarFest, but by the time the weekend was in sight, we all knew what we were in for - rain and lots of it. I drove up under partly sunny skies on Thursday morning, but the patches of clear began to close up early that evening. As usual, the greatest concentration of HAA campers were in the Muller Sector - a spot commanding a beautiful view of the entire campground. More importantly, it was the highest spot on the entire campground! When the deluge finally arrived on Friday, property values in the Muller Sector had increased dramatically.

Friday was spherically wet - that is, it was wet any way you decided to look at it. Apparently we received somewhere between 30 and 40 mm of rain. Remarkably, the numbers of campers and attendees did not thin out noticeably. Down at the Unihedron tent, Anthony, Cathy, and I huddled in the few square centimetres which weren't exposed to the weather. Our main fun was emptying the reservoir of rainwater which continuously formed on one side of the tent roof. It was a constant job.

There were several talks I really enjoyed. First was Doug George's workshop on Maxim DL and MaxDSLR. He gave it at just the right pace and answered lots of questions very clearly. The second was Paul Mortfield's talk on Urban Astro-imaging. Paul has produced an amazing set of images from his backyard observatory in Thornhill. My favourite image of his was a narrowband shot of a small portion of the disk of M31 which revealed numerous emission nebulae *in M31*!!!

As always, the most fun was hanging out with fellow astronomy enthusiasts. On late Saturday afternoon, an HAA gathering over at the tent of Bruce and Marg was witness to some very impressive lightning and downpours. You really miss the energy of these events when you are in a house ... or it is clear.

It was the 25th anniversary of StarFest and my 10th time there. No amount of rain can spoil the attraction of spending quality time with kindred spirits!

The Best Starfest Ever by Ollie and Lou Dacrcy, Astronomaires Extraordinaire

Actually, for us it was the best Starfest ever. Why? We got to speak to 52 new people, made a host of new friends, and got to try out our new generator which, by the way, was instrumental in recharging 8 batteries beside providing power for our camper.

The Summer Of Our Discount Tent by Glenn Muller

With the best skies forecast for early in the week Gail and I headed up to Starfest on Tuesday. We claimed our favourite spot then joined HAA members, Lou and Ollie Darcy for the only observing night we would get. Although Lou would be hampered by a glitch that appears inherent to Intelliscopes, we still managed to knock off many favourite targets and I made two new finds in Cepheus for my log.

The first object was NGC 6939, a compact open cluster of faint stars that is practically overwhelmed by the plethora of brighter stars edging the main band of the Milky Way. With a wide angle eyepiece the second object, NGC 6946, can be maneuvered into the same field of view. This is probably the best way to locate this face-on spiral galaxy which, in my 6" reflector, is a somewhat circular gray haze slightly larger, in area, than the companion open cluster.

Wednesday would start out sunny but the afternoon rain began about the same time we found Tim Harpur. A lucky meeting, actually, since we'd drained the battery on our van and Tim had booster cables on his Celestron powertank.

A brief opportunity for viewing came at 4:45am, Thursday morning. The Milky Way was as bright as I'd ever seen it, so I got Tim up and we shared my dob and his binoculars until dawn brightened the sky. During this time I would find a third new object in Cepheus; NGC 7510 which is a small, rectangular, "chisel-shaped" cluster consisting of 8-10 stars with a few fainter ones appearing to averted vision.

We spent most of Thursday watching the field fill with astronomers despite the gloomy outlook for the rest of the week. The rain started started about 7pm and would be the dominant feature for the next 30 hours.

Now, I must admit that come Friday night, morale in our tent was at an all-time low. We were managing to stay relatively dry but, for Gail and I, it was our third star party this summer at which we'd found ourselves enduring monsoon-like conditions. The novelty had definitely worn off. However, a trip to the main tent where we joined other HAA members in an astro-trivia contest

helped to lift our spirits - and the next day would be typical Starfest!

Saturday was warm and humid, with the sun and wind conspiring to dry things out. The astronomy village slipped into a breezy, relaxed, state and there was much to do. The weather was still a factor and rather than spend another night in a wet tent we, like many others, elected to pack our camping stuff and leave after the evening's presentations.

Having completed that chore (and discarding an old cooler to conserve space in the van) I headed down to the swap tables. We'd recently built a permanent backyard observatory so I was hoping to sell our Kendrick Shelterdome. While waiting for a buyer, I noticed a small gathering around Story Musgrave, the event's keynote speaker. I left the shelterdome in charge of selling itself, and approached the man who'd helped design and repair the Hubble Space Telescope (HST). He obligingly gave me an 8"x10" signed portrait, and I returned to the swap table just in time to meet another obliging fellow. This one gave me $75 and I gave him the observing tent. The day was improving by the minute!

By the time I'd safely stored the autographed picture in the van, the $75 was starting to smoke in my pocket. I hustled down to the vendor's tents and found relief by trading some of the cash for a Cheshire collimator. Then it was time for Doug Welch's presentation and, as expected, Doug was most entertaining.

The next speaker was astrophotographer Jay Ouellet, and, while Jay was setting up, Story Musgrave took the seat in front of me. It was too good an opportunity to pass up. I introduced myself and asked if I may shake his hand. I also asked his opinion on the future of the HST. With a look that implied that "failure is not an option", he said, "We're going to fix it." He then told me that confidence is quickly growing in the shuttle program and there are plans to repair the Hubble that are just waiting to be scheduled. We talked for a few moments about how NASA has slipped the James Web Telescope project back to 2013 at a cost of a billion dollars, then it was time to return to my seat.

As if on cue, the evening's thunderstorm started just as the main tent filled for the door prizes. The usual fare was given away; books, eyepieces, filters, binoculars, telescopes. Names are drawn, people clap, happy winners troop up to the front, and I sit patiently waiting for the main talk of the night. Which is why, when MY name was drawn for the Orion 4/12" reflecting telescope, I just sat there, stunned. It only registered when a cheer erupted and smiling faces turned toward me. Gail laughed and said "Well, you'd better go get it". As I carried the large box back to my seat, Terence Dickinson gave me a big smile.

The scope turned out to be Orion's popular tabletop Starblast, and I suddenly realized why I'd chucked out the cooler and bought the collimator. There'll be a full review of this fine little unit in October's Event Horizon but, for now, I'll just say it gives excellent views for its size.

Story Musgrave's keynote presentation was on his life before, during, and after his shuttle days. He was also the technical advisor for the movie *Mission to Mars* which he said was technically quite accurate but he didn't like the ending. Naturally, he got a huge standing ovation at the end of his talk.

After re-arranging the back of the van, to accommodate the box containing the new scope, we drove home in the rain. But I didn't care - it had been a great end to another memorable Starfest.

The Verzyden View by Jack Verzyden

It was great to see everyone at Starfest this year. Even though the rain dampened the viewing it still boils down to friends we see every year. I enjoy the comraderie sometimes more than the actual viewing. Story Musgrave is an awesome human being. It was good to hear that Hubble just might get the fix it needs.

Podcasts: Space Place To Go! *from NASA*

No time to think about the wonders of the universe, much less how to explain them in a simple way to your students? Sign up for the new Space Place Podcast. Listen when you have time. In each Podcast, a NASA scientist answers fascinating questions about space and Earth science, with a little technology thrown in. Go to `spaceplace.jpl.nasa.gov/en/educators/podcast` to subscribe. Or you can listen now on your computer or read the transcripts. Best of all, you can listen while you go for a walk, looking up at the beautiful night sky and thinking about all that is out there, known and unknown.

Upcoming Events

The next HAA meeting is Oct 13, 2006 at the Hamilton Spectator Building which is located at 44 Frid St, near the junction of Highway 403 and Main St West in Hamilton. Admission is free. Everyone is welcome! If it is clear, there will be observing in the parking lot after the meeting.

Chair's Report *by Glenn Muller*

Was that Summer? Never mind, we all know that some of the best evenings for viewing and imaging happen in the Fall, and those who enter the second annual HAA Scope Contest could end up observing with a brand new telescope generously donated by Mike Spicer.

This year, entrants are required to write an article for the Event Horizon. The length should be between 300-600 words and be astronomy-related. The deadline for entries is October 31, 2006 and articles should be submitted to chair@amateurastronomy.org

The contest is open to everyone except council members who will do the "blind" judging. Blind judging means that I will accept all entries and replace the entrants name with a number, then pass them on for judging. The judges will not know who wrote the articles until they let me know which one they've judged to be the best, so get writing and good luck!

Speaking of council members, we are rapidly approaching our annual general meeting. At that meeting we vote in the slate of councilors for the next year. At this time of writing I do not know if any "executive" positions will be vacated but we do have room for some "councilors at large". If you have a desire to be on council, please let me know a.s.a.p. and I will see that your name is put forward for consideration by the membership.

A slight change in organization, that you may have already noticed, is that Bob Christmas is now helping Anthony Tekatch with the website. Currently, Bob is handling the gallery section, so, if there are any pictures you'd like posted you should send them to him via the "Images Editor" link on the site's About Us page.

While I'm on the subject of images, I'd like to plug Tim Harpur's new venture. Tim has recently developed a unique style of taking and processing pictures that give the end result an extremely vibrant look. His terrestrial shots are as interesting as his astrophotography, and his prices are (in my opinion) too low. Anyway, check out his website at www.ArtisticDigitalScenery.com or, better yet, just ask Tim to show you his portfolio – it's eye-popping!

There's tons more news in this issue, so why don't I stop here and let you get to it. Just remember that anyone can contribute to the newsletter, and for the next couple of months your submission could win a telescope! Disclaimer: articles posted on the website's Activities Page are not eligible.

Clear Skies!

Glenn invites your comments on these topics or any aspect of the club. He can be reached via:

`chair@amateurastronomy.org`

Observers Notes

2006-07-23 Aprés la Déluge, clarité!

by Mike Spicer

Another serious downpour yesterday washed the air over Hamilton, leaving beautiful transparency overnight. A nap in the evening meant I could observe all night (or until it clouded over).

My Nexstar 11 mount now carries the C11, a Celestron ED80, a 60mm finderscope and a Nikon SLR with 300mm telephoto lens - a lot of top-weight, balanced by 14 pounds of counterweight below the scope. The 11" has a permanent DSI mounted at f/2 and I can also image through the ED80 (a 30' FOV) or the finderscope (a 1° FOV).

There's no more accurate way of star-aligning a goto than having the star image in the centre of the DSI imaging screen. Last night I collected images of M27 from the patio at home and then put a DSI on Heather's scope to image the same planetary nebula through her 6" Schmidt-Newtonian - with excellent results.

I turned the scope to NGC7479 in Pegasus, a favourite galaxy of mine, as dawn started to colour the images blue. Meanwhile, Heather and I enjoyed binocular views of Venus, the Pleiades and the most beautiful slim crescent Moon with exceptionally bright ashen light. All in all, it was a great observing opportunity!

Michael Spicer, a Hamilton attorney, and past HAA councilman, is an avid observer/imager who owns various telescopes and also published various "observing projects" on: double stars, variable stars, Saturn, Jupiter, globular clusters and planetary nebulae.

`deBeneEsse2001@AOL.com`

2006-07-27 BRANTFORD PUBLIC NIGHT 28 JULY AN OVERWHELMING SUCCESS!

by Mike Spicer

Tall fluffy white clouds floated in the heated blue sky after dinner. That didn't stop a dozen H.A.A. members from coming out in force to the Brantford Tourism Centre with a large selection of telescopes and binoculars for public observing. It's an active club with members offering the public a great display!

Chairman Glenn and Gail brought goodies they laid out on tables at the Centre for the public to take away: magazines, booklets, pamphlets and copies of the Event Horizon... and all disappeared! The Centre's sumptuous meeting room was set up with over 50 comfortable seats and an overhead AV system... H.A.A. telescopes were displayed for discussion.

Tim Philp introduced our very well-received digital AV presentations on "The Sky Tonight", our club "Hamilton Amateur Astronomers", "Observing at Binbrook" and "Observing Jupiter on 28 July from Brantford"... the room was filled and by 7:30 pm about 18 people stood along the back wall, through the doorway and out into the foyer. Glenn served as our club expert, fielding questions from the crowd afterward.

Meanwhile, the sky became beautifully clear and stayed warm with a light breeze to keep us comfortable (but mosquitoes too, alas). Club members set up a dozen scopes outside while the sun was still shining in the west: from Clyde Miller's 11" Nexstar at one end of the parking lot to Heather Neproszel's 6" Schmidt-newtonian at the other end, refractors, reflectors, Maks and binoculars were strung out for people to observe first the crescent Moon and its Ashen light even before sunset; then Jupiter with 2 moons on each side, and after 9 pm the Great Red Spot moving towards CM transit plus the prominent shadow of Ganymede in the North Polar Region, and after 9:30 when darkness took hold, a variety of deep sky objects such as M13, Albireo and M57 overhead.

Twice as many members of the public (almost 100 in all, I think) showed this summer compared to last year! Two dozen or more came after the presentations ended, to do some observing. A lot of credit goes to Tim Philp for doing such a great job of advertising the event through radio and newspaper notices. This year a number of people brought their scopes out, seeking guidance in setting up and using them. There were many pleased faces looking through their own scopes at the moon for the first time! There were a lot of questions about telescope mounts, eyepieces, and how to join the H.A.A. Perhaps more great Brantford people will come to Binbrook and to our fall meetings!

Thanks to the many members who came out to make the evening a success: Glenn and Gail, Tim Philp, Bob Christmas, Heather, Jackie Fulton, Clyde, Don Pullen, Greg Emery, Darryl and Sandy Maude and their daughter, and Mike Spicer who brought the Space Music. Selfless member contribution makes Hamilton Amateur Astronomers THE BEST ASTRO CLUB TO BE IN!

2006-07-29 Thank You Brantford!

by Glenn Muller

The HAA public night in Brantford was a success not only through the participation of the members, as listed in the previous post , but also through the wonderful attendance of the people of Brantford who came out to share the evening.

If there are any left -over questions about the HAA, dobsonian reflectors, or astronomy in general, please feel free to e-mail me at: chair@amateurastronomy.org

For those looking for advice on buying an "electronic" telescope, you should contact Mike Spicer at `DeBeneEsse2001@aol.com`

We hope we will see you again!

Observer's Notes 30 July 2006

by Don Pullen

I checked the Clear Sky clock around mid day and it was indicating potentially fair conditions for the evening. So I decided to load up the car with my astronomy gear before heading off for various day activities with the hope of heading up to Binbrook upon my return to town. While I was out of town, I tried to check my email to see if there was going to be any observing, but I couldn't get in, however the CSC was indicating that conditions were improving.

I decided to head up to Binbrook around 10pm in the hopes of running into other observers. After checking the main gate and the various alternate locations, I set up at our Tyneside alt location. The air was still and you could feel some dampness trying to make its presense. It meant the mosquitos were likely going to be a nuisance - I was prepared for them.

By 10:30, I was set up with the 6" reflector, the binos, chair and table prepared for several hours of observing. Fortunately the sky was cooperating and the earlier clouds had finally vanished. To the north was the glow of Hamilton, but it was further ruined by an additional glow from a ball field in Binbrook. To the south

however, was clear skies and a good view of Sagittarius and Scorpius. I decided to focus on all the Messier objects around the teapot.

I started off with the easy and bright globular cluster M22 which I had seen before. Then scanned along the bottom of the teapot and picked up M69, M54 and with a little difficulty, M70. In my binos I could see the fuzz of M7 and M6 so I trained the scope on them to reveal 2 nice clusters twinkling away. Unfortunately the Jewel box was obstructed by trees nearby so I moved higher above the horizon to look at clusters M28, M25, M18, M24 and M9. I also enjoyed the paired cluster/nebula M21 & M20 (at least in the wide field of my scope). And of course the nebulas M8, M16 and M17.

Unfortunately by 12:30, the dew was getting bad, affecting my view finder, binos and even my reading glasses. Hercules was emerging from the Hamilton/Binbrook glow (they still hadn't turned off the lights at the ball field), and I could visually make out the smudge of M31. I swung the scope around to take a look, but by then even the eyepieces were dewing up and all I saw was a brighter smudge. If I needed any encouragement to pack up, that was it. While it was a quiet night without any fellow observers, it had been rewarding in it's own right - the most Messiers bagged in a single evening so far.

By 12:45 I was ready to leave, however I noticed that the car's engine light was on which gave me a bit of a scare whether I was going to be stranded for the night. Fortunately all the fluid levels were fine, so I chanced the trip home. I'm sure the trip to the garage is going to put enough of a dent in the pocket book to delay some astronomy purchases. But that will be a story for a different blog.

2006-08-01 A Comet in Hercules *by Glenn Muller*

The periodic comet 177P/2006 M3 (Barnard 2) was recently recovered after a span of well over a hundred years. It is currently visible in binoculars in the constellation of Hercules and is shining at a magnitude of 8.4 as it heads towards Draco. This comet has a large 10' coma and is fairly diffuse due to its proximity to the Earth.

A finder chart is posted at `http://www.skyhound.com/sh/comets/177P.gif`

UPDATE: Aug. 2,2006 Gail and I searched for the comet, last night, to no avail. We both thought we might have, maybe, almost detected a smudge with our 10x50 binoculars but were unsuccessful with a low-power search using our 6" reflector. Other reports have suggested it is very diffuse and the current heat haze doesn't help, either. Still, we know where it should be so we'll keep looking and maybe it'll brighten.

2006-08-02 Wild Duck Cluster M11 image *by Tim Harpur*

There's almost as many stars in this cluster as there were mosquitoes attacking us Monday night while I was imaging.

2006-08-03 A.T.M.'s MEET! *by Mike Spicer*

Cloudy summer nights are great for getting together! H.A.A. members met tonight for an A.T.M. (Accessorizing Telescopes, saving Money) meeting.

Don P. brought his 6" Newtonian by to collimate - and did a bang-up job, checking it afterwards with a new laser collimator! Mark G. came to pick up a variable polarizing filter set and stayed to look over eyepieces, settling on a Radian. By then, Don had selected a 6 x 30 right angled finderscope and fitted it to his scope - a perfect fit! Tim P. oversaw the collimating process, regaled us with stories and advice, and picked out a Kendrick dew system for humid observing sessions.

ACTIVE OBSERVERS like the H.A.A. have interesting monthly meetings, great observing sessions and a super Newsletter filled with contributions about our observing sessions. We also get together to share ideas and accessorize our scope setups when it's cloudy. Why pay full retail (or more) at a local shop when you can try out equipment before buying, then pay a lot less for it from other club members at our cloudy day ATM meetings?

ATMs meet in our comfortable homes - air conditioned and bug-free with pleasant conversation. ATM's better prepare us for our next clear night! ATM's - another benefit of our GREAT ASTRONOMY CLUB.

2006-08-04 Binbrook Friday Night

by Tim Harpur & Mike Spicer

The weather and mosquitoes were very cooperative. Myself, Jackie, and Don showed for a very pleasant night of star gazing. I spent most of my time imaging - unfortunately, what I mainly had intended to image was within a few degrees of the rather bright moon. Jackie and Don seemed intent on finding as many faint planets as possible - I think there may have been some success with Uranus and Neptune - however, the question usually remained "Which of these stars is the planet?". Finally, an attempt was made to locate the comet in Hercules. We finally packed in just after 2am - Don, still full of energy, wanted to go to Tim Horton's - I opted for the 1/2 hr drive home followed by rest.

UPDATE FROM THE PATIO - SUPER FRIDAY, 4 AUGUST

Few summer nights have the excellent transparency that tonight offered. I would have loved to go to Binbrook but I had to practise autoguiding technique - want to be ready for Starfest.

I set up about 120 pounds of equipment on the pier while Tim P watched and Heather set up her 6" S-N. My SCT is set up for F/2 imaging giving almost the same scale of image that the DSI gives on the ED80 refractor.

M27, reduced from DSI image on ED80 refractor

The sky was clear with hundreds of stars visible and very steady seeing; the air was comfortably warm with no wind and few bugs (um.. another reason I didn't go to Binbrook tonight). I could not get the autoguider to work with the monitor I was using, but managed to take some good images of Uranus with its moons close to 81 Aquarii (see last week's post about that), and the ED80 gave good images of M27, above is a copy in reduced size and format.

Heather was looking for a comet in the keystone of Hercules, but the house got in the way. We took binoculars to a nearby location and found the comet where predicted, much larger than M13 but with much lower surface brightness.

A Moonwalk

by Glenn Muller

Equipment: 6" reflector; Pentax 21mm & 7mm ep's; Moon filter; Ruckl's Atlas of the Moon

After the rain-forest-like weather we've had, lately, it was nice to have a clear and comfortable night to observe. We opened the GEM 'n I Dobservatory at 9:30pm and went straight to the (10 day) Moon.

Though its transit altitude was only 19°, seeing was steady enough that atmospheric turbulence would only be a mild disturbance at high power. Bright enough at low power to merit a Moon filter we spent most of our time around the northern terminator region of Sinus Iridum. The rugged semi-circular ridge that borders the sinus (bay) both starts and finishes with a promontorium (cape). In our inverted view, the lower Promontorium Laplace anchored a well-defined shadow peak.

Just outside of the bay were the two craters named for Helicon, a 4th century BC Greek astronomer, and La Verrier, the mathematician who first calculated the position of Neptune. Moving 'up' and to the 'right', we followed a dorsum (wrinkle ridge) to the crater named for Caroline Herschel.

As we let the Moon drift through the eyepiece we soon came upon an interesting triangle formation, measuring about 25km across, casting three long, narrow, shadows. It took a lot of flipping through pages in Ruckl's atlas before I identified it as an unnamed formation lying between Delisle Crater and Dorsum Bucher (page 9). An Internet search only turned up the following entry from a Peter Grego: "The large triangular assembly of mountains in the north is unnamed on Rukl's lunar map. The mountain group, probably a remnant of the original Imbrium ramparts that were buried by lava flows, occupy an area equivalent to the Isle of Wight. Here they cast spire-like shadows onto the plain".

With the Moon now dropping behind a tree, we ended our tour with a look at Montes Teneriffe (Teneriffe mountains) and Mons Pico which is 2400 metres

high but placed far enough from the terminator, this night, that very little shadow was detected.

The last observation of the night was a very fast-moving meteor coming from the general direction of ? dare I say ? Perseus.

2006-08-05 Moon, M31, Trifid Nebula shots

by Tim Harpur

The Trifid nebula from Binbrook last night. It was a clear night - warm - slight breeze - and almost no mosquitoes. Unfortunately, most of the DSOs I had intended on imaging were within a few degrees of the very bright moon. I imaged the Trifid Nebula - and after seeing the severe moon glow washing out the scene I abandoned the idea of trying to image the other nearby DSOs. I was still able to filter out (via software) enough of the wash to get a usable image, which has now been posted to my gallery. I also tried imaging Andromeda for the first time - my initial attempt was with my main scope (8" SCT) - which wasn't turning out so well - so I moved my camera to my guide scope and used my main for guiding. With a focal length of only 400mm, my guide scope had the perfect FOV - capturing M31 (Andromeda) and its small companion galaxies M32 and M110.

Tim Harpur, has held an interest in science and astronomy from a young age, and studied science (including courses in astronomy and astrophysics) at the University of Waterloo and holds a BSc. Since joining the HAA last fall, his interest in astrophotography has been rekindled with his new Meade 10" SN LXD75 (GT) and Canon Digital Rebel XT for the imaging. He spends a lot of cold nights alone with his new scope - but enjoys the results!

11 AUGUST Binbrook Perseid Party

by Mike Spicer

Binbrook Conservation Area was open from 8:30 pm Friday until after 1 am Saturday. The public was invited to attend our Evening Under the Stars to look through telescopes and to take part in the Perseid Meteor Watch held by Hamilton Amateur Astronomers.

Glenn Muller set up the club digital projector in the pavilion at viewing area "B" and treated early attendees to several visual presentations before dusk. Members set up telescopes nearby and several dozen members of the public came out in the clear skies and comfortable temperatures!

Photos of the event are available on the website.

The gibbous Moon lit the sky after 10:30 pm but bright Perseids drew "OOOOOHs" and "AAAAHs" from the gathering crowd as expected. Some members and guests set up telescopes and cameras on the hill to capture Perseids and to observe a number of deep space objects, and eventually, the Moon itself. After midnight the light breeze that had kept mosquitoes away, drove us to sit under a blanket for comfortable observing. This writer started falling asleep and packed it in for the night about 1 am.

The brightest Perseid was caught at about magnitude -4 about 10:15 pm; several bright Perseids had a noticeable green tinge and many seemed to streak through Aquila and Sagittarius. But the hourly rate was quite low. With the shower's peak predicted for Saturday afternoon, perhaps Saturday night will have a better show.

UPDATE: SATURDAY NIGHT, 12 AUGUST

The 12th of August is peak day for the Perseids. After a busy Saturday, a big picnic supper and a short evening nap, I headed out to Binbrook for Round 2 with the Perseids.

Opening the park for others at 10:15 pm, I set up on the Hill with Heather Neproszel, an 8" S-N on a GEM mount and the Nikon camera with about 7 shots left. The Perseids were MUCH brighter and more numerous than on Friday night, and a brilliant Perseid lit up the zenith and streaked towards Jupiter before we were even set up, ending in several small explosions and leaving a long smoke trail.

Once set up and taking 5 to 7 minute exposures, I was able to capture several meteors within half an hour (subject to film processing hazards, of course. ... UPDATE: I got images back, showing some meteors! Huzzah! Also captured Chi Cygni, but that's another story). I took photos until the rising Moon became a

nuisance. Using the 8" reflector we then observed a number of deep sky objects in Sagittarius before heading home after midnight.

2006-08-13 Another night under the stars

by Don Pullen

After a very pleasant afternoon BBQ, it appeared that a couple of people were interested in heading out to Binbrook to look for a few more meteors and do some general observing. So with that in mind, I trotted on up to the main gate at about 9pm. While I was confirming the main gate was still locked, a young couple in from Toronto arrived who had checked out the club website and thought the park was always open for observing. After diplomatically correcting their misconceptions, I offered to escort them over to the alternate site on Tyneside in hope of finding some of the other club members.

I ran into another couple who were already set up and apparently were long time observers at this location. Brett and Cheryl were very enjoyable to talk to and were very open about sharing their giant binos and 100mm refractor. The young couple and I were able to observe a few clusters while explaining a little more about astronomy and the club.

Shortly afterwards, Jackie showed up and we had an official get together of the "rogues". Not being one to pass up an opportunity to share in some comaraderie and recognizing the moon wouldn't be up for about 2 more hours, I set up my binos and 6" reflector. Scorpius was just setting and I hoped to catch the Jewel Box before it dropped below the trees. Still being too slow with set up, I missed that object (again) but did manage to view M80. Before leaving the southern skies for the night, I also observed globular cluster M9 for the first time.

Fortunately Jackie brought lots of batteries with her so once she was properly aligned (based in part on my inaccurate watch), she was good to go.

Amongst our observing and socializing, more general public joined us and some came over to look through the scopes & binos, ask some good questions about astronomy and gasp in amazement at some of the bright meteors (it was better than Friday night). It was like another public night with nearly a dozen people showing up. We were able to show them a number of globular and open clusters, and a few nebulae. Of course I had my green laser going to help show off the sky better. (Sure wish I had that narrow band filter for the nebulae).

During this time we tried again for comet 177P, but after a false identification, we convinced ourselves we only saw M92. (Too bad on the comet, but another Messier for me.)

Later I swung the scope towards the north east and started after a few Messiers around Cassiopeia. We found the double cluster pretty easily. Jackie mentioned Kemble's Cascade so I gave it a try and found a very neat string of stars leading to a small open cluster. After a false identification of M103, which turned out to be NGC457, I did eventually locate M103 and then followed shortly afterwards by NGC663 - all very nice little open clusters.

Regrettably the waning moon was now getting high enough to be a nuisance for observing. I decided to look at M31 anyways, but as expected it was washed out by the moon glow. Having given up on other objects, Jackie conceded defeat and swung her scope over to the moon with a filter. Impressed (and I guess also admitting defeat), I decided to do the same. Way too bright in the scope initially - even with the moon filter. Brett suggested a red filter which made it look like Mars, but it did help bring out some new details. Inspired, I tried several filters including the yellow. Remembering reading something about stacking, I stacked the yellow and moon filters and it made observing quite pleasant. When Jackie started trying to identify regions on the moon, I flipped NightWatch over to the moon chapter and we picked up quite a few of the larger features including the Tycho and Copernicus craters, and the Apennine mountain range. The rays emanating from Tycho were amazing.

Thus ended another fun night of observing with good company and good skies.

2006-08-17 When is a globular not a comet...

by Glenn Muller

Last night was good for backyard observing. I could even see the faint haze of the Milky Way from Cygnus down to the Teapot. While my computer booted up, I checked out Ptolemy's Cluster (M7), and M6 with binoculars and my 6" reflector, then I went looking for the "little cat's eyes" (zeta scorpii) but, alas, the little cat was in a tree.

The Keystone of Hercules can often be a challenge, from Grimsby, but tonight the entire constellation was visible. My chart of the periodic comet 177P/2006 M3 (Barnard 2) indicated it should be within a degree of the bright'ish star 52 Herc so I panned up for a look. After a few minutes I found a tiny halo with a bright

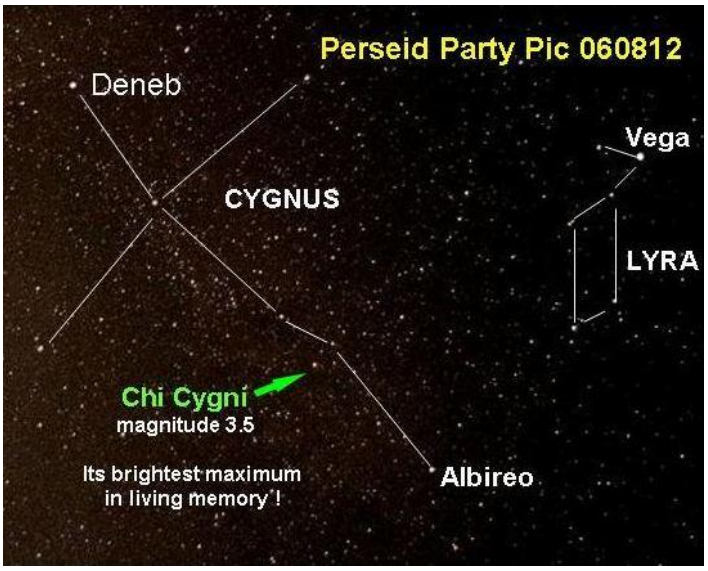
core. Sure looked comet-like. It was too small to be M92 and, in my limited experience, the central condensation appeared too bright in comparison to the halo to be a planetary.

From what I'd read, comet 177p was supposed to be large and diffuse - not tiny and bright. By now Cartes du Ciel was up on the computer screen so I zoomed into the area and found that what I had "discovered" was not a comet at all, but globular cluster NGC 6229.

However, my uncertainty put me into some esteemed company: NGC 6229 was first spotted in 1787 by William Herschell who catalogued it as a planetary. Then, in 1819, an Admiral Smyth reported it as a comet. It was eventually determined to be a "very crowded cluster" by Msr. d'Arrest in the mid 19th century.

Located about 1 1/2 degrees north of 52 Herc, NGC 6229 makes a nice equilateral triangle with a pair of mag. 8 stars. In my scope, it's diffuseness is evident at 57x. At 171x, there is just a hint of the outer stars resolving. It would probably be an interesting object to image. Even if it's not a comet.

2006-08-21 Perseid Party Picture *by Mike Spicer*



Taken on 12 August at Binbrook with a Nikon SLR in a 7 minute exposure, it shows the LP red variable star Chi Cygni at magnitude 3.5 - reaching its brightest maximum in decades. Update 22 August - Chi is still very bright at magnitude 4.1 - almost equal to nearby Eta Cygni. In binoculars, Chi's deep red colour is quite beautiful.

August 24, PLUTO NOT A PLANET?? THAT'S SOME PUT-ON! *by Mike Spicer*

Professional astronomers voted on Thursday 24 August 2006 to strip Pluto of Planet status, relegating it to a collection of "dwarf planets". Isn't this just discrimination against Pluto's size? As if Mercury is gargantuan.

In literature, the appearance of dwarves has resulted in the theft of jewellery, violent death and warfare. Beware the creation of "dwarf planets". And what of "minor planets" such as spherical Ceres, are they dwarves now, too? Shall professionals be permitted to import dwarves into the inner Solar System? Do we want dwarves as neighbours? Won't property values fall?

I think the professionals bumped Pluto solely because it is small. The final selection criteria seemed contrived to exclude Pluto. This decision was made only by professional astronomers - you know, the people who think "telescopes" have to be 6 meters in diameter or more... is prejudice being applied to celestial objects? What's next? Will smallish nations be called "satellites" of the US? Oh.. they already are.

Pluto is small, cold and far away, with no professional astronomers of its own. It's over the horizon and soon, like Canada on US maps, it will be relegated to the unknown, colourless space on charts. Shame.

2006-08-29 EARLY MORNING ASTEROID OCCULTATIONS VISIBLE FROM HAMILTON *by Mike Spicer*

Asteroids are large rocks in space. Although they are mainly telescope objects (or worse!) it can be fun to watch them get in the way of - and eclipse - stars. We call these short-lived events "asteroid occultations". The star is covered and its light seems to dim for a few seconds as only the (usually fainter) asteroid is visible.

If you have a CCD camera it's possible to take images of the event - bad polar alignment helps, as the drifting star/asteroid show up as a series of dots that fade and then brighten again. It's doubly exciting if you are able to discover (by a second dimming) that the asteroid has a smaller satellite (or are they now called "dwarf satellites"?).

Thursday morning 31 August at 5 a.m. you will see Orion the Hunter and his yappy little dog, Canis Minor above the E horizon. Asteroid Mnemosyne (Knee-moe-sign-ee) will occult an 11th magnitude star close to the bright star Procyon about 5:04 a.m. (10h 04 UT) More information here:

www.asteroidoccultation.com/2006_08/0831_57_7968_MapNA.gif

Maybe you prefer to be up early on the weekend. The large but very faint asteroid (or is it "dwarf planet" now?) Aletheia (179 km diameter) will occult 11th magnitude star TYC 1926-00812-1 at 4:58 a.m. (9h 58m UT) on Sunday morning September 3rd. More information here:

www.asteroidoccultation.com/2006_09/0903_259_9397_MapNA.gif

Friday morning 22 September at quarter to 4 in the morning, if you're up, you can see the large but dark asteroid (or dwarf planet) Lachesis, 174 km diameter, pass over and eclipse 12th magnitude star TYC 5245-01143-1. This is a faint event and for more info:

www.asteroidoccultation.com/2006_09/0922_120_5514_MapNA.gif

Supernova 30 Aug 2006

by Mike Spicer

The exceptionally beautiful little spiral galaxy NGC 214 is located just E of the Square of Pegasus, not far from M33 (which it resembles, although NGC 214 is small and very faint). It is high in the eastern sky at dusk and stays high all night.

Yesterday a supernova was discovered in this galaxy. The star is close to the SW corner of the little galaxy and yesterday was 17th magnitude - but it should brighten quickly! This is your chance to see an image of a supernova!

2006-09-01 A VISITOR TO M35 IN GEMINI

by Mike Spicer

The constellation Gemini is visible in the early morning before the sun rises. M35 is a brilliant open cluster at the foot of Castor, one of the twins in the constellation Gemini. Observers love to look at the large cluster of bright stars, easily visible in binoculars.

Observers with telescopes like to look for the much smaller and fainter open cluster NGC2158 just to the SW of M35.

Early in October the 10th magnitude asteroid Kalliope will seem to cruise right through M35, passing from W to E through the cluster over a five day period starting 6 October. The motion of the asteroid will be visible in binoculars and you can mark its progress on a chart, but by imaging the cluster over the five days, you will have a permanent record of its passing!

At Binbrook's Alternate Site

by Jackie Fulton

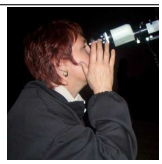
I met Brett and Cheryl after dinner to solar observe. Brett had his Coronado solar scope already set up. Brett explained how to use the solar filter on my GT80 and the proper way to align on the sun. Moving back and forth between the two, I couldn't get enough. Today was the first time I had ever looked at the sun.....fabulous!!!

Doug Black joined our little gathering of sun worshipers. He arrived in plenty of time to observe before the sun set too deeply in the horizon. Waiting for dark sky, we got out the charts and set our sights on mapping out the new Supernova in NGC 214. While it was agreed at 17 magnitude the seeing would be difficult, the consensus was "you don't know if you don't look". Not a great strategy.....but do-able. Doug Black, meanwhile, had gone to his car and re-appeared, smiling, carrying a small box. A Spectroscope !! The Sun, A Supernova, and A Spectroscope !!! On the same night !! Life just doesn't get any better !! You can't imagine my excitement !

Brett and Cheryl had family drop by with their niece and nephew to observe with us....to see Jupiter. Although the Clear Sky Clock had predicted clear sky from 9 pm to 1 am, the seeing was deteriorating rapidly. We immediately turned to the most important task at hand.....the kids had come to observe, they would not be disappointed. We each set our scopes and binos to capture different objects, so not one would be missed.

My little Nexstar and step stool made for the easiest viewing. The Go-To was perfect for quick slewing to each object as it popped in and out of the cloud cover. The kids got a short look at Jupiter and a hazy Moon before clouds covered them for good. Mizar was the clearest double star. The Big Dipper and major stars were identified. In the end however, despite our valiant efforts, the kids thought "the way the red dot finderscope worked was THE BEST".

With that, another enjoyable evening had come to an end. The cloud cover showed no signs of breaking up, so we packed up and headed for home about 11:00 pm. The Sun, the Supernova and the Spectroscope would have to wait for another day.



Jackie Fulton is a longtime Hamiltonian and a member of the HAA. A new comer to astronomy, she appreciates the guidence and support recieved from fellow HAA members, as she continues to learn. Her little Nexstar GT80 is never far from her side. Jackie is an active observer, setting her sights on astrophotography.

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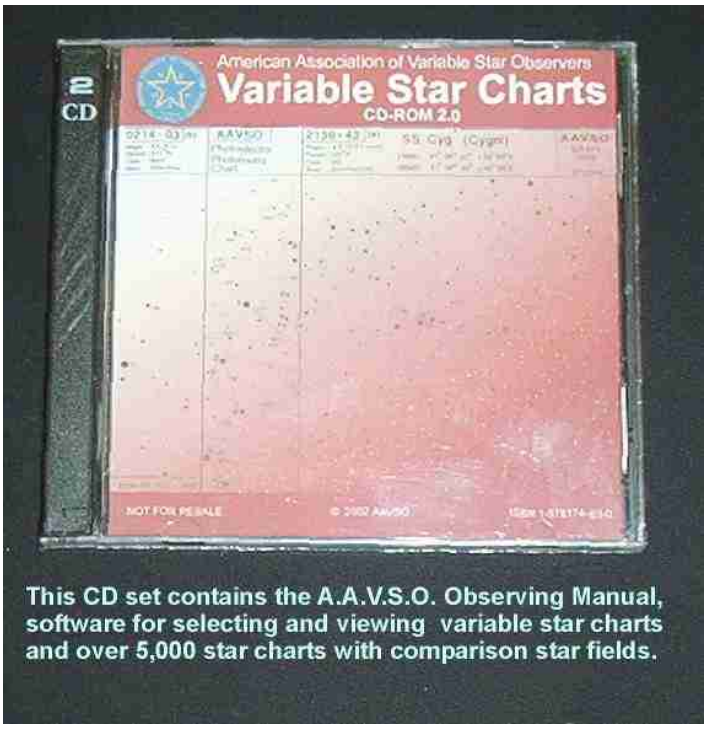


Free for the Asking from Mike Spicer... a 2 CD set from the A.A.V.S.O. with 5,000 variable star charts and a complete AAVSO observer's manual. Something essential for the variable star observer. email: DeBeneEsse2001@aol.com

For Sale

Mike Spicer `DeBeneEsse2001@aol.com`

I have a really excellent Meade 8" SCT and accurate clock drive that I have put on a steel wedge and then mounted on a 4" white TAL pier with long black feet, that I would like to sell - a great deal for someone who wants to observe visually or to take film or CCD images. It has lighted setting circles and a SUPER plug-in heated Tuthill dew shield... just a great set-up for observing from a seated position!

Oh! and I acquired a new 6" Maksutov that I will put on an LXD-55 mount with Autostar 497 - a wow! setup.

Win this telescope from the Hamilton Amateur Astronomers!

The HAA is pleased to present its Second Annual Scope Contest. The prize is a Meade 70mm refractor on an alt-az tripod with an electronic drive, battery pack, and hand paddle control. It also comes with a 6x30 finder, 2 quality eyepieces and a 90° diagonal.

To be eligible, entrants must submit an astronomy-related article for the Club's Event Horizon newsletter. The article must be 300-600 words long and e-mailed along with your name, address, and phone number to `chair@amateurastronomy.org` no later than midnight of October 31, 2006.

There is no age limit but contestants must live within 75 kilometers of Hamilton, Ontario, as calculated by Mapquest (`www.mapquest.com`), and be able to pick up the prize at the December 8, 2006 club meeting. HAA Council members (the judges) are not eligible. Once entries are judged they may be edited before publication.

The winner will be announced on the HAA website (`www.amateurastronomy.org`) on, or before, December 1, 2006. Inquiries may be e-mailed to chair@amateurastronomy.org

Good luck!

NASA's Space Place

Deadly Planets

By Patrick L. Barry and Dr. Tony Phillips

About 900 light years from here, there's a rocky planet not much bigger than Earth. It goes around its star once every hundred days, a trifle fast, but not too different from a standard Earth-year. At least two and possibly three other planets circle the same star, forming a complete solar system.

Interested? Don't be. Going there would be the last thing you ever do.

The star is a pulsar, PSR 1257+12, the seething-hot core of a supernova that exploded millions of years ago. Its planets are bathed not in gentle, life-giving sunshine but instead a blistering torrent of X-rays and high-energy particles.

"It would be like trying to live next to Chernobyl," says Charles Beichman, a scientist at JPL and director of the Michelson Science Center at Caltech.

Our own sun emits small amounts of pulsar-like X-rays and high energy particles, but the amount of such radiation coming from a pulsar is "orders of magnitude more," he says. Even for a planet orbiting as far out as the Earth, this radiation could blow away the planet's atmosphere, and even vaporize sand right off the planet's surface.

Astronomer Alex Wolszczan discovered planets around PSR 1257+12 in the 1990s using Puerto Rico's giant Arecibo radio telescope. At first, no one believed worlds could form around pulsars—it was too bizarre. Supernovas were supposed to destroy planets, not create them. Where did these worlds come from?

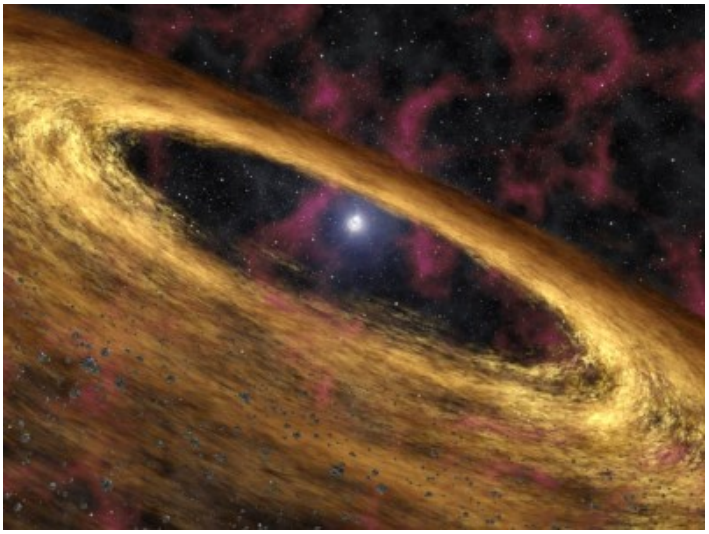
NASA's Spitzer Space Telescope may have found the solution. Last year, a group of astronomers led by Deepto Chakrabarty of MIT pointed the infrared telescope toward pulsar 4U 0142+61. Data revealed a disk of gas and dust surrounding the central star, probably wreckage from the supernova. It was just the sort of disk that could coalesce to form planets!

As deadly as pulsar planets are, they might also be hauntingly beautiful. The vaporized matter rising from the planets' surfaces could be ionized by the incoming radiation, creating colorful auroras across the sky. And though the pulsar would only appear as a tiny dot in the sky (the pulsar itself is only 20-40 km across), it would be enshrouded in a hazy glow of light emitted by radiation particles as they curve in the pulsar's strong magnetic field.

Wasted beauty? Maybe. Beichman points out the positive: "It's an awful place to try and form planets, but if you can do it there, you can do it anywhere."

More news and images from Spitzer can be found at ¡a `www.spitzer.caltech.edu` . In addition, The Space Place Web site features a cartoon talk show episode starring Michelle Thaller, a scientist on Spitzer. Go to `spaceplace.nasa.gov/en/kids/live/` for a great place to introduce kids to infrared and the joys of astronomy.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.



Artist's concept of a pulsar and surrounding disk of rubble called a "fallback" disk, out of which new planets could form.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

Council meetings

All club members are welcome to attend the council meetings. Contact `info@amateurastronomy.org` for details.

Web Watch

`http://www.cosmotions.com/`

Time-Lapse Photo Animations of the Cosmos by Thad V'Soske

submitted by Stewart Attlesey