

## REFLECTIONS / REFRACTIONS

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University Lowbrow  
Astronomers

October 2018

VOLUME 42, ISSUE 10

### Astronomy at the Beach 2018 September 14th, 15th.

(A Summary of reports from member emails)



Photo by John Manney taken Saturday, before things got busy



Photo by Jack Brisban

Charlie Nielsen wrote "When we were packing up Saturday night I spoke with Brian and two park rangers. The park officials stated they estimated about 1000 guests Friday night, and 3800 Saturday night. They were more confident about Saturday night's number than Friday's. If we really only had 35 scopes on the field I am amazed we survived it! "

Lowbrow's in attendance were: Brian Ottum, Charlie Nielsen, Jim Forrester, Doug Scobel, Ken Ruble, Ken Leitch, Chuck Steele, Adrian Bradley, Mike Radwick, John Manney, John Causland, Dave Snyder, Abe Oraiqat, Norb Vance, Doug Bock, Harry Anderson, Jack Brisbin, Joy Poling, Clay Kessler, Mike Hagan and Barry Wissman.

John Manney reported "I counted 230 people looking through my telescope. This would be roughly one observation per minute for 3.5 hours. No wonder I was exhausted!"

Adrian Bradley wrote "We had all the planets and objects on the ecliptic, as well as things between Ursa Major/Minor, Casseopeia, and some summer triangle objects if we chose to look straight up. The lines were big around the middle of the fields, and thinned out for those of us who got lazy and parked where we could unpack our stuff, carry it a few feet, and set up shop in front of our vehicles. I had many excited and happy kids find the glow of M31 (and M32) through my scope. I also gave an unexpected many people a glimpse into how cameras get attached to scopes to take pictures. "

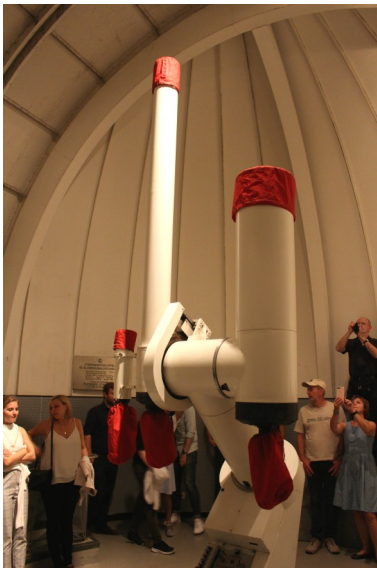
Harry Anderson wrote "I was located adjacent to the lake and beach last night. The lines of those wishing to view got pretty long at times (10-12 people deep), and several of the folks were unaware of the second collection of telescopes nearer the parking lot, and on the other side of a line of trees. The views of the sky were pretty generous at this location, the only viewing hindrance was a line of trees farther off to the west (which gobbled up Jupiter pretty quickly). It sounds like between the "adjacent to the parking lot guys" and us "beach guys", we really had the sky covered. The opaque black barriers were particularly helpful in diminishing the stray vehicle lights that would otherwise make it over to the telescopes near the beach. Transportation to the beach seemed really unavailable - I gave up and it took me 5 trips to bring stuff from my car to set up on the beach. The scattered goose poop on the grass near the beach was my second biggest complaint."

## Urania Observatory, Vienna Austria

By Don Fohey



Photo of Urania Observatory taken thru taxi window. ( All Photos by Author )



My wife and I were on a lifelong dream trip to Vienna, Austria. On the taxi ride from the airport, we were driving along the canal and I looked across and saw an observatory dome! We drove right in front of the building which was named Urania. Later, I looked online and saw that the observatory was named for the Muse Uranian which represents Astronomy. The observatory had scheduled a "Sternwarte" on Wednesday and Friday evenings weather dependent. It was Wednesday and it was clear, so after dinner we headed down for a stroll along the canal to the Urania building. We joined a group of about 25, mostly young people, for a presentation and a opportunity to look thru the telescope. I asked for "two" tickets which made it clear that I didn't speak German and the attendant said quietly, "The presentation is in German only". I said "That will be fine" and I received the tickets and we took our seats for the presentation.

The presentation seemed to explain the various type of objects that could be seen with the telescope located in the brightly lit Vienna sky. The presentation included images of bright nebula (M42), planetary nebula (M57), globular clusters (M13), open clusters, comets and the planets. There was also an explanation of star evolution used to explain planetary nebula and nova (M1).

We then proceeded up the curved staircase into the observatory dome. I took a few photos before the lights were turned off. There was a small finder scope, a very long focal length refractor and what looked like a 10 inch or so classical cassegrain. We were the only English speaker so I didn't ask any questions. It was exciting to see the dome rotate and observatory doors open. The first object of the evening was Saturn which was low on the horizon. We stood in line for our turn to observer. I was looking forward to a quality image in the refractor, however, the view was small with the magnification set for about 40X. The cassegrain was set for about 250X but the focus seemed soft and atmospheric turbulence provide for a poor view. I have been spoiled by the exceptional views I have experienced this summer in Lowbrow telescopes with Saturn higher in the sky. We were weary from the long day of walking and we departed for the walk back to our hotel. It was fun to see this remarkable building in the middle of a European city. It was encouraging to see the same enthusiasm in Europe for the wonders of the night sky that the Lowbrows experience at our public outreach events.

Read more about the observatory at [https://en.wikipedia.org/wiki/Urania,\\_Vienna](https://en.wikipedia.org/wiki/Urania,_Vienna)



Urania Observatory Continued



Observatory Doors Opening



View of the Cassegrain



Left: Door to stairs up to observing platform

Right: View of Vienna thru observatory doors



Upcoming Events

DATE	EVENT	LOCATION	
Saturday October 6th	Open House	Peach Mt.	Coordinator: TBD
Saturday October 13th	Open House	Peach Mt.	Coordinator: TBD
Tuesday October 16th. 7pm to 9pm	Star Party at Westland Public Library.	<u>6123 Central City Parkway</u>	Charlie Nielsen, Public Event., Telescopes are needed
Friday Sept. 21st. 7:30pm	Monthly Meeting	Room G115 Angel Hall 435 South St. Street Ann Arbor, MI	Jim Shedlowsky "The McMath/Hulbert Observatory-Then and Now"
Thursday Oct. 25th 8pm to 10 pm	Star Party for Emily Kwon's astronomy class (7 <sup>th</sup> and 8 <sup>th</sup> ) graders	Emerson School (Scio Church Rd. at Zeeb Rd.)	Coordinator: Brian Ottum

**Perseid Adventure Brian D. Ottum, Ph.D.**

As astronomers we are always looking for dark, open places where we can set up. With the impending Perseids, last week I went on a search using Google maps. Our family has been kayaking on the Au Sable river for a decade, and I've observed from the campground on the Alcona pond. But it is very damp, there are lights & campfires, and there is not a lot of wide open area. Once a few years back I took a bike ride into the nearby Huron National Forest and came upon a shooting range. Google maps satellite view, and Google Earth showed quite a lot of open area at that shooting range.

So the Monday before the Perseids I searched and found that it only costs \$40/year to join the gun club. Quickly the check was in the mail to the secretary. Theresa called to inform me that I was a new member of the Glennie Sportsman's Club, and to give me the combination to the gate locks. Sunday afternoon I was in the Midland area with the in-laws, so it was only a short drive in my RV to the site. I arrived as the sun was sinking below the thick trees. The main entrance opened to a nice field, but it was a low bowl ringed by trees. I hiked up a steep sandy wall to find the upper field which was two football fields long in the longer dimension. This is where I parked, and set up my two cameras. There were NO lights, and NO light domes and the Milky Way was fantastic. Smoke from the western fires and high humidity limited me to seeing just mag 5.7 stars.

As night fell, the dew did also. Both wide angle lenses fogged up. I used to carry a 12VDC blow drier and battery but, alas, no more. So I breathed heavily on the lens to warm them, and carefully wiped them with a tissue. My heat tape system was also not with me (largely because the battery is so heavy). So I opened up a pair of disposable toe heaters and affixed them with rubber bands to the bottom of each lens hood. Good to go for the night.

The fireball picture was taken just 2 minutes after I started taking continuous shots. I took over a thousand more, with both cameras, and never got a better shot. It's that way with imaging meteor showers. Fireballs are one in 1,000 shots, even in dark skies and at shower peak (non-Fisheye lens). Technical details: Tracker running at  $\frac{1}{2}$  sidereal speed, in order to split the blurring between the stars and the trees, Canon 6D modified to enhance near-IR (as you can see with the emission nebulae with lots of H<sub>2</sub> – Lagoon, Trifid, Eagle, Swan), 24mm lens @ f/2, 30 seconds exposure, ISO 3200.



Perseid Adventure Continued

This site could possibly be a new alternative to our wonderful Atlanta hospitality experienced up until a few years ago. As this light pollution map shows, the site is in the darkest hole in lower Michigan. There is a nice grassy area, out of the way, for tenting. There are porta-potties. There is electricity. The larger open area to the right (east) may possibly be good, but is more uneven ground.

The site is not perfect. No water. The club is no longer highly active, but there is shooting during the day (especially on Saturdays). I was set up in the middle of the shotgun clays shooting field, so we'd have to move our scopes off to the side each morning. Alternatively, I could investigate the lesser-used SE area for a field where we could leave our scopes set up by our cars. Caveat: I have not broached this subject with the club. They may wish that we have a couple more astronomers join in order to bring several "guests" to the weekend observing. But this place is VERY dark and less than 3 hours from AA.



Left: Google Map route. Center: Ariel View. Right: Dark Sky Map (Images provided by Author)

Monthly Activities

The September 8th. Peach Mt. Open House was cancelled because of clouds.  
 Charlie Nielsen reported that the September 29th Leslie Science Center event was held but clouds prevented viewing. Five attending Lowbrows had discussions with about a dozen guests.

Member Photo



Awni Hafedh sent this image to members in a Sept. 25th email.  
 "I wanted to share with you a special image that I just finished processing, it is the NGC2264 (Cone Nebula, Christmas Tree Cluster, Snowflake Cluster, and the Fox Fur Nebula) captured in H-Alpha filter. Now most will say what is so special about it, the answer is I start capturing this object on March 17th, 2018 at Hudson Park which was the same day were I met the club members of Low-brow doing the Messier Marathon, that was the most beautiful night that I had with so many people that share the same hobby which lasted till Sun Rise. " " I managed to capture 50 subs that day and then I gathered another 50 subs on Sep 15th, 2018, each sub was 2min exposure."



### Mark Cray Remembered

The Lowbrows say goodbye to our friend, astronomer and telescope maker Mark Cray. Mark is remembered for his kindness and generosity. As one of our earliest members, he has long been an inspiration and mentor to many of us. The Lowbrow's had a memorial gathering at Peach Mt. on Saturday Sept. 29th.

Photo of Mark at what appears to be AATB some years ago. Photo from:  
<https://www.instagram.com/lowbrowastronomers/?hl=en>

The comments below were extracted from emails sent to members.

Kurt Hillig: Those of you who remember Mark Cray - former Lowbrow, and maker of the 90mm and 120mm eyepieces and the 6" finder scope for the McMath 24" - should know that he passed away this afternoon after a long struggle with cancer.

Paul Walkowski: Mark was the inspiration for my Octagonal veneer plywood "wood scope" whose photos are still in the gallery for both god Lowbrows and AATB. A great, humble guy who enjoyed sharing knowledge with others. More of an ATMer than an observer, but he did both. My first views of Uranus and Neptune were through his long FL 5" and 6" refractors at AATB. My best memories of him were at the meetings after the meetings in the pizza place on South U

Christopher Sarnecki: I got to know Mark in the mid 90s when I just obtained my first telescope (a 13" Coulter). Mark helped me rebuild it first by constructing an 85 mm finder scope, then replacing the primitive secondary with a nicely crafted secondary holder of his own design; and, lastly he produced a primary cell by making his own alloy, casting it, then turning it on a giant lathe. He came out to my house to help me reassemble the scope when, wouldn't you know it, the cell didn't quite fit the mirror. Seems the cell was a millimeter off and couldn't be re-machined. Mark calmly said he would be back next week. He returned with a newly made mirror cell that fit perfectly. That illustrates the man that Mark was. A talented tool and die professional, an amazing ATM'er, generous with his time, and a gentleman to all who knew him. He will be greatly

Mark Deprest: Mark Cray built the mirror cell for my 8" dob, I guess that's Mark's legacy, he loved to help those just starting out. His knowledge shared with everyone who asked. He was a friend and we all will miss him.

Lee Skyles: This is sad news and I am sorry I did not get to talk to him recently. As a young man in the Lowbrows back in the early 90's, Mark was truly an inspiration to me. I was fascinated with his machining skills and his modesty and his very down to earth nature, and of course our mutual love for astronomy. He would treat you like his equal, even though his skills were far superior, and he was very patient, and had exceptional 'teaching' qualities. I wish I got to hang out with him more (since I was too young for the Brown Jug at the time), and my condolences for those who knew him more than I. RIP friend, your legacy will always be with the Lowbrows!

## University Lowbrow Astronomers Meeting Minutes—September 21, 2018

President Charlie Nielsen brought the meeting to order at 7:36 PM. After welcoming one and all, he introduced the evening's speaker, Adrian College Astronomy Professor Nichole Zellner. Her talk, "Space Rocks! Impacts in the Earth-Moon System: What, When and Why?" spoke to the Moon's bombardment history and her studies of our satellite's dust-like regolith.

The Business Meeting commenced at 8:48 PM.

**President Charlie Nielsen** reminded the members of our public observing event at the Leslie Science Center on September 29 and Mark Cray's memorial service at Peach Mountain beginning at noon the same day. He also announced an event at the Westland Public Library on October 16 and a possible event at the Westland Montessori School, also in October.

**Vice President Adrain Bradley** is presently moving Instagram posts to our Facebook page and will soon have the process automated.

**Vice President Jim Forrester** reported the club's 17.5 inch telescope had a big weekend at Astronomy At The Beach September 14 and 15. Long lines queued to get some of the summer's best views of Saturn.

**Brian Ottum**, our representative to [The Great Lakes Association of Astronomy Clubs](#) (GLAAC), the organization of southeast Michigan amateur astronomy clubs and educational institutions that organizes Astronomy At The Beach, reported State Park authorities estimated 5000 people attended the two night event. He counted 30+ telescopes Friday and almost twice as many Saturday night. Member Chuck Steele worked with the Park to organize the viewing area. Brian has agreed to run an observing session at Emerson School (located at the corner of Zeeb and Scio Church Roads) October 25 and asked for assistance from the members.

**Vice President Larry Halbert** is moving to California. The past two years, Larry has produced very professional looking brochures promoting our Peach Mountain Open Houses and has seen to their distribution to area libraries and other educational institutions such as the Matthaei Botanical Gardens. Wolf Tytschkowski volunteered to take over the production and distribution of the brochures. Larry will likely be Vice President in absentia until next April's elections.

**Observatory Director Jack Brisbin** described the successful cleaning of the 17.5 inch telescope's primary mirror with optical wipes donated to the club by member and Data Optics' President, Dave Shindell. The mirror was still performing well, but application of the wipes made a miraculous improvement with no scratching and very little effort.

**Web Master Krishna Rao** was unable to attend and submitted his report to the Officers via email. President Charlie Nielsen read his report into the record:

I've updated the Young Astronomer page, the treasurer's page, the lowbrow flyer (from members only section), and the minutes/newsletters through August. I did not see minutes for June; if they exist, can they be re-sent to me for posting? The Instagram page got disconnected from Facebook at some point. I was not notified by the service (IFTTT.com) and only found out that the Instagram posts were not making it over to Facebook when Ginia Forrester noticed and told me. Anyone have a sense when this happened? If there are any pictures that didn't make it to Facebook, please let Adrain Bradley know (our club "Facebook guy")

Doug Scobel wanted a web presence write up (I've copied his two past emails about this below). Has Doug gotten what he needs? If not, I will work on it and circulate to the officers. (see "Addendum to Minutes")

One item for discussion is the website access logs/statistics. Dave Snyder pulled and scrutinized these each month, so maybe he can comment on why he did so and what he got out of them. I am super behind on getting the website reports (i.e. > 1 year). The process is pretty cumbersome (i.e. terrible) and I'm not actually sure what the point is (it's not like we are a commercial site that needs to really know these numbers).

## Meeting Minutes (continued)

Does anyone think I should be tracking this or doing anything with it? Unless there is a compelling reason to do so, I'm planning to take this off my to-do list, except occasionally to check due to curiosity. Much of our traffic is on social media anyway these days. Let me know if there are other web to-do items I have missed, since I think that's everything on my table right now.

**Treasurer Doug Scobel** reported a Club Treasury balance of \$6360 and 146 current Memberships, including a new member from New Mexico! ***Doug also repeated his email announcement that he is collecting for the 2019 editions of the Royal Astronomical Society of Canada's wall calendar (\$20) and Handbook (\$30) Members interested need to have their payments to Doug by the October 19 club meeting.***

Submitted respectfully by,  
Vice President  
Jim Forrester

**Addendum to Minutes**

On Wed, Oct 11, 2017 at 7:33 AM, Douglas Scobel <[lowbrowdoug@gmail.com](mailto:lowbrowdoug@gmail.com)> wrote:

Hi, officers, would one or more of you please provide me a write-up on how members can make use of our web presence, WRT Facebook, Twitter, and our blog?

The reason I ask is because I want to update my new member welcome letter and existing member renewal letter to the 21st century. They're still stuck in the 1990's, i.e., email-centric. I need to provide more modern information.

A paragraph or two or three is fine. I'm looking for info regarding following our Facebook and Twitter accounts, and our blog. The kind of information I need is:

How does one subscribe to and/or access the accounts?

What information and/or announcements does the club post to them?

Which one(s) can a member post to, and how does one do that?

Detailed instructions would be great - we could end up putting instructions on the members' only page, and I can refer to them in my welcome/renewal letters. Krishna and I did that recently for joining the Astronomical League, and I can follow the same model.

Who knows, with the right information maybe even *I could end up signing up on Facebook and Twitter. Be afraid. Be. Very. Afraid.*

Thanks in advance,

Doug

I think the place to start is to list all the electronic resources used by the club. Here's my attempt at such a list.

umich email groups ( mostly of the form [lowbrows-?@umich.edu](mailto:lowbrows-?@umich.edu) )

lowbrow website ( [www.umich.edu/~lowbrows/](http://www.umich.edu/~lowbrows/) )

private section of lowbrow website ( [www.umich.edu/~lowbrows/private/](http://www.umich.edu/~lowbrows/private/) )

young astronomer website ( <http://www.youngastronomer.org/> )

[lowbrows.org](http://lowbrows.org) ( [lowbrows.org](http://lowbrows.org) )

lowbrow blog ( [lowbrows.blogspot.com](http://lowbrows.blogspot.com) )

lowbrow google calendar

University Lowbrow Astronomers android app

facebook page

twitter page

IFTTT ( used to automatically send announcements to twitter and facebook, typically status of upcoming open houses )

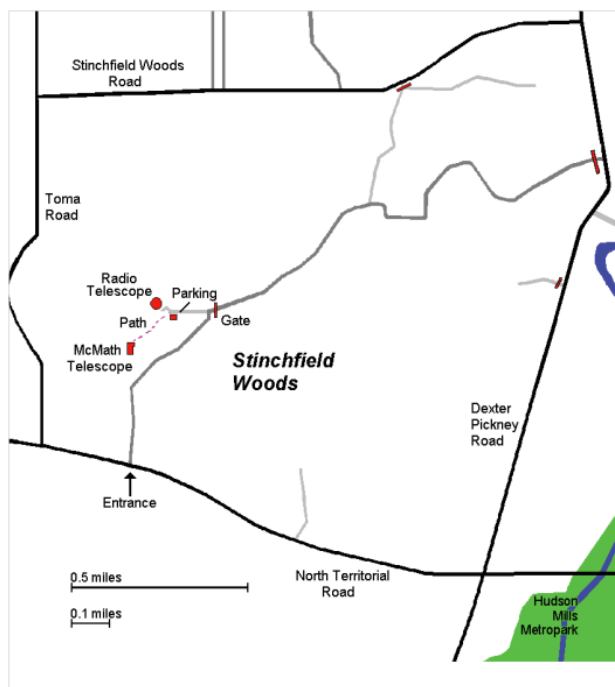
I'm not expecting all of this will be included in the welcome letter. But it should help flesh out what should be included.



### Places & Times

Monthly meetings of the University Lowbrow Astronomers are held the third Friday of each month at 7:30 PM. The location is usually Angel Hall, ground floor, Room G115. Angell Hall is located on State Street on the University of Michigan Central Campus between North University and South University Streets. The building entrance nearest Room G115 is the east facing door at the south end of Angell Hall.

Peach Mountain Observatory is the home of the University of Michigan's 25 meter radio telescope and McMath 24" telescope which is maintained and operated by the Lowbrows. The entrance is addressed at 10280 North Territorial Road, Dexter MI which is 1.1 miles west of Dexter-Pinckney Rd. A maize and blue sign marks the gate. Follow the gravel road to the top of the hill to a parking area south of the radio telescope, then walk about 100 yards along the path west of the fence to reach the McMath Observatory.



### Public Open House / Star Parties

Public Open Houses / Star Parties are generally held on the Saturdays before and after the New Moon at the Peach Mt. Observatory, but are usually cancelled if the forecast is for clouds or temperature below 10° F. For the most up to date info on the Open House / Star Party status call: (734) 975-3248 after 4pm. Many members bring their telescope to share with the public and visitors are welcome to do the same. Mosquitoes can be numerous, so be prepared with bug repellent. Evening can be cold so dress accordingly

### Lowbrow's Home Page

<http://www.umich.edu/~lowbrows/>

### Membership

The University Lowbrow Astronomers membership dues are \$30 per year for individuals or families, \$20 per year for students and seniors (age 55+) and \$5 if you live outside of the Lower Peninsula of Michigan. Membership entitles you access to our monthly Newsletters on-line at our website and use of the 24" McMath telescope (after some training). A hard copy of the Newsletter can be obtained with an additional \$18 annual fee to cover printing and postage. Dues can be paid at the monthly meetings, by PayPal, or be check made out to University Lowbrow Astronomers and mailed to:

**The University Lowbrow Astronomers**  
**P.O. Box 131446**  
**Ann Arbor, MI 48113-1446**

Lowbrow members can obtain a discount on these magazine subscriptions:

**Sky & Telescope - \$32.95/year or \$62.95/2 years**

**Astronomy - \$34.00/year, \$60.00/2 years or \$83.00/3 years**

For more information about dues or magazines contact the club treasurer at: [lowbrowdoug@gmail.com](mailto:lowbrowdoug@gmail.com)

### Newsletter Contributions

Members and non-members are encouraged to write about any astronomy related topic. Contact the Newsletter Editor: Don Fohey [donfohey@gmail.com](mailto:donfohey@gmail.com) to discuss format. Announcements, articles and images are due by the 1<sup>st</sup> day of the month as publication is the 7<sup>th</sup>.

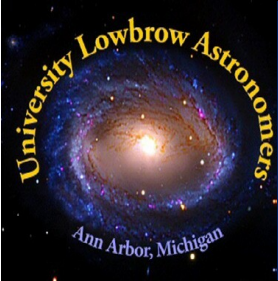
### Telephone Numbers

President:	Charlie Nielsen (734) 747-6585
Vice President:	Adrian Bradley (313) 354 5346
	Jim Forrester (734) 663-1638
	Larry Halbert
	Dave Jorgensen
Treasurer:	Doug Scobel (734) 277-7908
Observatory Director:	Jack Brisbin
Newsletter Editor:	Don Fohey (734) 812-3611
Key-holders:	Jim Forrester
	Jack Brisbin
	Charlie Nielsen
Webmaster	Krishna Rao

**A NOTE ON KEYS:** The club currently has three keys each to the Observatory and the North Territorial Road gate to Peach Mountain. University policy limits possession of keys to those who they are issued. If you desire access to the property at an unscheduled time, contact one of the key-holders. Lowbrow policy is to provide as much member access as possible.

### Email to all members

[Lowbrow-members@umich.edu](mailto:Lowbrow-members@umich.edu)



## University Lowbrow Astronomers



Member Club



Astronomical League Member Society  
#201601, Great Lakes Region

University Lowbrow Astronomers  
P.O. Box 131446  
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