

REFLECTIONS / REFRACTIONS

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University Lowbrow
Astronomers

Sept 2020

VOLUME 44, ISSUE 9

Astronomy at the Beach is VIRTUAL This Year

Brian Ottum Ph.D. wrote in an email to members on Aug. 24th.

Dear fellow Lowbrow astronomer,

Thank you for your previous support of Astronomy at the Beach! Over the past 24 years, we have given hundreds of thousands of telescopic views of the heavens to visitors; larger telescopes at this event frequently had long lines of visitors waiting for a look through the eyepiece.

This year, Astronomy at the Beach will be an online event - but our content is better than ever!

- Talks by professional astronomers.
- Cool Science Demonstrations.
- Astronomy teacher discussion panel.
- Live telescope viewing from sites across the U. S.
- Educational (and short) YouTube video suggestions.
- Online astronomy and space science resource suggestions by members.
- Presentations by local astronomers - several of whom are volunteer NASA/JPL Solar System Ambassadors.

This all happens 6pm-midnight on both Fri. and Sat., Sept. 25th and 26th.

PLEASE HELP US GET THE WORD OUT! Forward this email to anyone you think may be interested in astronomy - and we know they're out there! Please put this free, educational, family-friendly STEM event on your calendar and share the links:

- Website: <https://www.glaac.org/astronomy-at-the-beach-2020/>
- Facebook event: <https://www.facebook.com/events/1605600666263922/>
- AstronomyattheBeach on Twitter: <https://twitter.com/astroatbeach/>

Reply with questions to ottum@comcast.net

Brian D. Ottum, Ph.D.

Communications Volunteer

The following pages are a proposed revision to the Bylaws of the University Lowbrow Astronomers. A new OnLine Coordinator Officer position has been added to facilitate virtual meetings and events. Voting, previously limited to in-person at the April meeting has been expanded to include paper and electronic polling. Other changes are also included. Please review and cast your ballot as directed.

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BYLAWS OF THE UNIVERSITY LOWBROW ASTRONOMERS**Article I: Name**

The name of this organization is "University Lowbrow Astronomers" hereinafter referred to as *the Lowbrows or the Club*.

Article II: Object

The objects of the Lowbrows are to

- Maintain and operate the University of Michigan's 24" McMath telescope and other telescopes and equipment owned by the Lowbrows,
- Care for the Peach Mountain optical observatory facility for the use of the members and the public,
- Learn about astronomy from each other and guest speakers,
- Share our knowledge of astronomy with the public through open houses and other programs,
- Promote the enjoyment and appreciation of astronomy by club members and the public, and
- Have fun while accomplishing all of the above.

Article III: Members

- A. All those who have paid their dues within the preceding 12 months will be considered members. Members are encouraged to attend meetings and other events, and to actively participate in all activities of the Club.
- B. Membership dues shall be at one price for individual or family membership and at a lower price for students and seniors (age 55+).
- C. Members are entitled to receive the monthly *Reflections* newsletter and to be placed on the mailing lists (newsletter, e-mail, etc).
- D. Members may use the 24" McMath telescope after receiving training and being certified by the Observatory Director. Untrained members may use their own telescopes on Peach Mountain once they understand the rules for entering and using Peach Mountain.

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- E. Honorary membership may be extended to deserving individuals by consensus of the officers; honorary members may not vote or hold office, except if they pay dues and become regular members.
- F. The term of membership expires one year from the first of the following month after dues are paid.
- G. As long as the Club continues to exist, dues will not be refunded.
- H. Only dues-paying members will be eligible to vote or run for office.
- I. Family membership includes only those in the immediate family. Only family members age 14 and over are eligible to vote.
- J. Members may be expelled from the Club for reasons such as:
- Willful misuse and/or damage to Club and/or University property
 - Illegal activities on University property or at Club activities
 - Other conduct deemed inappropriate behavior by the officers
1. A motion to remove the member must be brought before the membership, if a majority of the officers approve the motion.
 2. Removal will be effective upon approval by two-thirds of the members voting.

Article IV: Officers

A. The elected offices shall be:

- President
- Vice President(s)
- Treasurer
- Newsletter Editor
- Observatory Director
- Webmaster (optional)
- Online Coordinator

1. Eligibility for office

- a. The President must have previously held another Lowbrow office.
- b. There shall be at least one and no more than four Vice Presidents to share the duties.
- c. The Observatory Director must have served on the Observatory Committee for at least one year.

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- d. The Webmaster must have the appropriate ability. If no member has appropriate abilities, this office may be left vacant and the Treasurer must appoint someone to maintain the Club e-mail list.
- e. The Online Coordinator must have the appropriate ability, with access to the tools needed to hold virtual meetings.
- e.f. A member may hold up to two offices simultaneously, except that the President may not also be Treasurer or Vice President.

B. Duties of Officers

1. The President is responsible for:
 - a. Establishing Club direction with the advice and consent of the elected officers and general membership.
 - b. Presiding over Club and officers' meetings.
 - c. Coordinating and overseeing the activities of the Club in accordance with its objectives.
 - d. Acting as a Club representative to The University of Michigan, other organizations and public events.
 - e. Approving official Lowbrow correspondence.
 - f. Ensuring the Annual Report is prepared during the first quarter of each year.
 - g. Being the alternate signer on the bank account or appointing a vice president as alternate signer.
2. Vice President(s) is (are) responsible for:
 - a. Organizing monthly programs and keeping other officers informed of monthly programs and changes.
 - b. Assisting the President with governance of the Organization and presiding over meetings in the President's absence.
 - c. Keeping a record of the meetings, to be published in the following month's newsletter. This need not be word-for-word but rather an outline of what the program was, proposals, motions, voting results, announcements, etc.
 - d. Chairing Working with the Online Coordinator and Communications Committee on virtual meeting set up for guest speakers and permission to record presentation. (One Vice President is assigned this task.)
 - e. Notifying the membership, through e-mail or other means, of upcoming meetings and events.

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3. The Treasurer is responsible for:
 - a. Keeping a record (including receipts) of all income and expenditures of the Club.
 - b. Monitoring the use of Club funds and reporting any misuse.
 - c. Preparing a financial report to the Lowbrows twice-once a year to be presented with the Annual Report in spring and at a fall meeting.
 - d. Keeping a record of who has paid dues.
 - e. Keeping the membership address list up-to-date. All changes of address and phone number should be reported to the Treasurer.
- f. Paying for expenditures
 - 1) Expenditures shall be considered as one of two types:
 - a) General Operating Expenditures
 - b) Special expenditures
 - 2) General expenditures are the ongoing expenses incurred by the officers in the fulfillment of their duties and the basic objectives of the Club. Receipts must be submitted within 90 days of the expense for reimbursement. These do not require a vote by the membership to pay. Examples:
 - a) Minor repair and upkeep expenses of the telescope and observatory.
 - b) Cost of printing the newsletter, producing and mailing meeting and event announcements, and printing and disseminating posters and flyers.
 - c) Long-distance telephone charges by members on Lowbrow business and accounting to a maximum of \$20 in one month.
 - 3) Special expenditures are one-time expenses for a special purpose or of a large sum (over \$250). These do require a vote by the membership to pay. Examples:
 - a) Major expenses towards the repair and upkeep of the McMath telescope and observatory.
 - b) Purchases of equipment for the telescope or observatory,
 - c) Expenses of special events and activities planned by the Club.
 - d) Special expenditures under \$250 must be approved by a majority of the club officers, including either the President and/or Treasurer.

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- e) Since the Treasurer and the President have check signing authority, checks written to either party must be written and signed by the other.
4. The Newsletter Editor is responsible for:
- The appearance and technical details of the newsletter with input on contents from the officers and members.
 - The contents of the newsletter should be:
 - Visually appealing
 - Grammatically correct
 - Scientifically and factually accurate
 - Interesting
 - The contents of the newsletter should not be
 - Defamatory
 - Plagiaristic
 - Offensive to members of any race, creed or gender
 - Obscene
 - Inane
 - Printing the newsletter in an economical way consistent with the above specifications.
 - Publishing the Annual Report in the Newsletter in the first quarter of each year.
5. The Observatory Director is responsible for:
- Chairing the Observatory Committee.
 - Reporting all progress and necessary expenditures on the telescope to the membership.
 - Keeping track of the Lowbrow's gate and observatory building keys to Peach Mountain and maintaining a log of holders.
 - Maintaining and changing the combination on the observatory lock. Reporting, as needed, to the University regarding any repair or maintenance issues with the observatory building.
 - Keeping the public and membership informed on the status of the open houses via voice mail and the internet web pages.
 - Supervising the responsible use of Peach Mountain for observing by the membership.
6. The Webmaster is responsible for:
- Maintaining the contents of the Lowbrow website with input from the officers and members.

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- The appearance of the website should be:
 - Visually appealing
 - Grammatically correct
 - Scientifically and factually accurate
 - Interesting
 - Up to date
- The contents of the website should not be
 - Defamatory
 - Plagiaristic
 - Offensive to members of any race, creed or gender
 - Obscene
 - Inane
- Maintaining the club e-mail list or designating a subcommittee to do so.
- The website shall include an e-mail address or some other mechanism for website visitors to contact the Club. The webmaster is responsible for answering this e-mail or designating a subcommittee to do so.

7. The Online Coordinator is responsible for:

- Chairing the Communications Committee
- Ensuring that meetings (monthly meetings and special events) are available to the members and public through virtual means, as needed.
 - Members will determine which meetings or event should be available virtually, to members-only or to the public.
- Assisting with virtual officers' meetings as needed.

C. General Duties of Officers

- Officers shall prepare an Annual Report to be published in the Newsletter in the first quarter of each year (before the April elections).
- If an officer is unable to perform a specific duty at a specific time, that officer may call upon another officer or member to perform that duty.
 - The substitute officer must follow the responsibilities for the original officer as outlined above.
 - The other officers must be informed of the change in responsibilities.

D. Interim Officers

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- All officers who will not be able to perform their duties for more than three consecutive months must inform the Club so that an interim officer may be elected.
 - An interim officer's term will end when the regular officer resumes his/her duties or on the date of the next regular elections, whichever comes first.
- E. Resignations and other Vacancies
- If an officer is no longer able to perform his/her duties, the office will be considered vacant.
 - The positions of officers who quit the Club, or resign the office are considered vacant. Resignation must be in writing or by email and submitted to the President or Treasurer and will be assumed to be effective immediately upon receipt.
 - All vacancies will be filled as soon as possible by a special election which will proceed as a regular election would.
- F. Removal of Officers
- Officers may be removed from office for any of the following reasons:
 - Misuse of Club funds
 - Willful misuse and/or damage to Club and/or university property
 - Assault of a member or nonmember during a Club meeting or outing.
 - Failure to perform the duties of the office in an appropriate and/or intelligent manner.
 - Failure to pay dues.
 - A motion to remove the officer must be brought before the membership, if a majority of the remaining officers approve the motion.
 - Removal will be effective upon approval by two-thirds of the members voting and the position will be considered vacant.

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Article V: Elections & Voting

A. Elections

- Officers will be elected at the April meeting. Terms are to begin immediately after the meeting and end after the next annual elections.
- Nominations will be taken by the President starting at the March meeting. Names of nominees will be published in the April Newsletter prior to the April meeting. Nominations may continue at the April meeting.
- Voting will proceed by paper ballot and/or electronic polling if more than the necessary number of candidates run for any office or by a show of hands if there are no uncontested offices at the April meeting. Only members present at the meeting (including those participating on-line) may vote.
- The count will be tallied by two members not running for office.
- The nominee for an office obtaining a plurality of the vote will win that office.

B. Voting

- Voting for officers will be by paper ballot and/or electronic polling or a show of hands if there are no uncontested offices, of those members present at the meeting.
- Voting for the removal of an officer will be by paper ballot or email. Ballots will be mailed or emailed to current members with known addresses and members will have at least 15 days to return the ballot (by mail or email) to a designated officer.
- Voting for the removal of a member will be by paper ballot or electronic polling of those members present at the meeting.
- Voting for amendments to the Bylaws will be by show of hands and/or electronic polling plus any absentee ballots received by the date of the vote.

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5. Voting for all other motions will be by a show of hands and/or electronic polling. A simple majority of those voting is required for a motion to pass.

Article VI: Meetings

A. Club Meetings

1. Regular meetings shall be held monthly at a day, time and place as convenient as possible to the membership, and shall be announced in the newsletter or by email to all members.
2. The Lowbrows may plan other events and activities from time to time, to be held at the day, time and place decided upon by the membership.

B. Officers' meetings

1. Officers shall meet for live discussion, face-to-face, on at least a quarterly semi-annual basis to
 - a. Plan Club functions and participation in other events.
 - b. Prioritize and set goals for each year.
 - c. Determine when major projects are needed on the McMath telescope or the Peach Mountain observatory and grounds.
 - d. Organize support as needed to assist the officers in completing their duties and to carry out the Club activities and projects.
 - e. Advise and consent on interaction with the public and university.
 - f. Annually internally audit the treasurer's books.
 - g. Annually publish the standing rules of the Club.
2. Officers may also make decisions by e-mail provided all officers respond.

Article VII: Committees

A. Committees consist of chairs as designated by these Bylaws and volunteer members. If more members than required volunteer to serve, the officers will decide who will serve from those volunteering.

B. Standing committees are

1. Observatory Committee, chaired by the Observatory Director, consisting of at least 3 members, inclusive of the chair. Responsibilities are:
 - a. Supervising the renovation, repair and upkeep of the 24-inch telescope and observatory.

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- b. Scheduling of observation time with the 24-inch telescope should an increase in demand cause conflicts to arise.
- c. Publicity and organization of public open houses and events held at Peach Mountain.
- d. Interfacing with the University on issues relating to the observatory and grounds, the McMath telescope, open houses and special events held at Peach Mountain.
- e. Training of members on the operation and care of the 24" McMath telescope.
- f. Keeping an inventory of all equipment and property belonging to the Lowbrows.

2. Communications ~~Public Relations~~ Committee, chaired by one of the Vice Presidents ~~the Online Coordinator~~, consisting of at least 3 members, inclusive of the chair. Responsibilities are:

a. Assisting the Online Coordinator with virtual meetings, via hosting, etc.

a. Greeting new attendees at monthly meetings.

b. Welcoming guests at star parties and providing Lowbrow information (e.g., club membership information, star party etiquette, etc.).

c. Organizing annual elections, especially electronic polling.

d. Coordinating with the Webmaster on Public Relations outreach, including producing flyers and contacting media outlets.

C. Ad hoc committees may be formed and disbanded as needed. Any member of the Club may chair them.

Article VIII: Parliamentary Authority

Meetings shall be conducted according to the most recent edition of *Robert's Rules of Order* as interpreted by the presiding officer, and in which they are not inconsistent with the Bylaws or special rules of the Club.

Article IX: Amendment of Bylaws

These bylaws may be amended after the following conditions have been met:

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1. All members have been notified, in writing through the Newsletter and by e-mail, at least one month before voting is to take place, of the exact wording of the proposed amendment.
2. All members unable to attend the meeting when the vote is scheduled to take place may send an absentee ballot to the Treasurer. The ballot must be received by the Treasurer before the date of the vote.
3. All members present at the meeting may vote.
4. A simple majority of those voting, including absentee ballots, is sufficient to approve the amendment.

Article X: Dissolution of the Club

- A. Dissolution of the Club can only occur upon vote of the membership using the conditions for amending the bylaws, except that approval by two-thirds of those voting is needed to pass.
- B. Once the motion for dissolution is approved, the Club will work with the University to remove the Club's property from Peach Mountain, ensure the McMath telescope is in working order, and return the keys to the University.
- C. Non-monetary assets and equipment of the Club will be disposed of using these methods in the following order:
 1. Auction to members, with minimum bids set by the officers.
 2. Offer of sale of remaining assets to the public with prices set by the officers or by auction.
 3. Donation of assets to schools, other astronomy clubs, or other non-profit organizations.
- D. All monetary assets, including proceeds from the disposition of the Club's assets and equipment as mentioned above, shall be distributed in equal shares to those members who are on the rolls on the date of the dissolution vote.

Revision 2 of the Bylaws was approved by the membership on April 18, 2003

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Bylaws amended April 16, 2010 by vote of 30(yes) to 2(no).

VOTING

There are three methods of voting.

1. Vote "Live" when logged into ZOOM at the September 18th. Meeting.
2. Vote by mail in ballot. Print the following page and follow mailing instructions.
3. Vote by email. A ballot as a Microsoft Word document was sent along as an attachment with this newsletter. Edit that document and follow the email instructions. Send an email request to donfohey@gmail.com to receive another copy of the ballot.

University Lowbrow Astronomers

Bylaws Amendments 2020 Absentee Ballot

You may vote for/against all the amendments at once, or each Article individually. Ballot will not be counted if you fill in both parts. Ballot must be received by Adrian Bradley by **September 18, 2020**. You can submit this by email to Adrian (atbsigma@gmail.com)

or send it by mail to him at:

Adrian Bradley
8738 Ironwood Dr
Belleville, MI 48111

Name of member: _____

___ I vote **for** all the amendments to Articles IV, V, VI & VII.

___ I vote **against** all the amendments to Articles IV, V, VI & VII.

OR

Article IV – Officers For ___ Against ___

Article V – Elections & Voting For ___ Against ___

Article VI – Meetings For ___ Against ___

Article VII – Committees For ___ Against ___

Signature: _____



Mark Deprest wrote in an email to members Aug. 23rd. "Nice little surprise on one of my Andromeda galaxy subs at 200mm. The end of a perseid meteor vaporizing ! Traces are still visible on the next sub 2 min later. Also added a crop of 14mm shot at another perseid in the andromeda region.

Pentax k1 iso 1600 100sec f4 200mm August 12th Quebec

The August meeting was recorded and can be viewed on you tube

<https://youtu.be/27mVumgqZ6U>

Upcoming Events

Open House events have been canceled until further notice.

DATE	EVENT	LOCATION	
Friday Sept. 18th. 7:30 pm	Monthly Meeting	By Video Conference. Instructions will be emailed to members,	Professor John Monnier, U/M. Topic: Telescope Interferometry – Stars and Exoplanets

University Lowbrow Astronomers

Monthly Club Meeting Minutes

21 August 2020, 7:38 pm, Individual Live Connections via conferencing tools

After some chatter to allow for late arrivals, President Charlie Nielsen called the meeting to order and then introduced our speaker.

Speaker

Who

Awni Hafedh

Subject

Astrophotography with a DLSR

A Q&A session occurred afterward with audience members using multiple formats to ask questions. Charlie thanked our speaker for the presentation.

Business Meeting

Name	Topic
President Charlie Nielsen (1:22:46)	Officers have been working on bylaw amendments in cooperation with the previous bylaw author, Kathy Hillig.
Kathy Hillig (1:23:25)	Went over the proposed bylaw changes while sharing her screen with the membership.
Vice President Adrian Bradley (1:43:22)	The GLAAC.org website now has the Astronomy At The Beach schedule of events up and running for the virtual affair.
Treasurer Doug Scobel (1:43:46)	Report emailed and read during the meeting: We have 152 memberships (we picked up three new members since the last meeting!). <ul style="list-style-type: none"> • We have \$8086.75 in the treasury. • Major line items: <ul style="list-style-type: none"> • Paid \$333.44 to Jack Brisbin for paint for the exterior of the observatory. • We received \$200.00 from an anonymous member to help defray the cost of the paint. <p>Thanks, Doug</p>
Newsletter Editor Don Fohey (1:44:46)	<ul style="list-style-type: none"> • Completed repairs on the donated ETX125 and added it to the list of equipment. Currently, Jim Forrester took possession to confirm it's rebuilt behavior before being available for loan to the membership. • Happy to have worked with Jack and Jim to assist a new member in deciding which club loaner scope he should borrow to get back into the astronomy hobby.
Observatory Director Jack Brisbin (1:48:09)	<ul style="list-style-type: none"> • Checked out the scope that the new member hopes to borrow to perform some general maintenance after being stored in the Observatory for the last couple of years. • The final phase of painting the Observatory is scheduled for tomorrow morning (weather permitting) with Doug Nelle and Tom Ryan. The stretchy quality of this Elastomeric paint should work better for our needs. • IT staff are still in the planning/discussion phase for getting an

	<p>internet connection to Peach Mountain. Currently, funding seems to be the biggest problem.</p> <ul style="list-style-type: none"> • The road up the hill still has not been repaired and if anything has only further degraded. • The new warning sign placed at the entrance seems to give the impression that no use would be allowed on campus property regardless of how small the group or how well it would be planned and handled.
Webmaster Krishna Rao (2:06:15)	Websites and periodicals have been updated for canceled events. Ask the Lowbrows website received an announcement about a new podcast ran by some undergrads from the University where they interviewed Pat Seitzer about his work with space junk. Wanted to make sure that club members were aware of the new astronomy podcast. After webmaster announcements were finished, he responded to questions about his work the last few months with COVID and where he sees things going this fall.
Kurt Hillig (2:18:19)	Ended up with a scope donated by Mark Cray's sister as she does not want to risk moving it to Florida. A friend of his has been looking for a scope for some time and doesn't have a lot of money. This scope seemed a good fit, and a donation check to the club in Mark's memory will follow.
Norbert Vance (2:19:58)	Discussed an email to the club about a business close to Traverse City that had an excellent selection of astronomy equipment. Doug Scobel, or anyone traveling close to it, should make an effort to visit. Enterdyne in Suttons Bay.
Numerous members (2:23:34) Awni Hafedh (1:38:50)	Awni's question from earlier about plans to do more virtual outreach events was brought back up, and various members discussed plans.

Addendum

Approximately 33 devices attended tonight's virtual meeting.

Adjourned
9:58 pm

Minutes were taken and transcribed by
Joy Poling



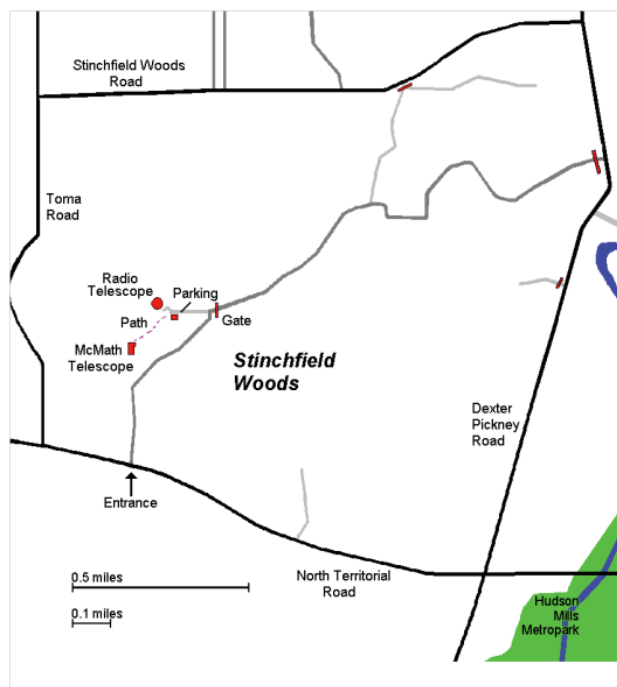
Jeff Kopmanis wrote in an email to members on August 9th.

“This is probably one of my better shots of Saturn that I took last night. ASI183MC camera, 30.6ms at 170 gain. Some 5619 frames taken. The quality was pretty consistently good, so I used 82% of the frames when stacking. If I remember correctly, the 183 camera nearly matches the visual resolution limits of my 8" SCT. This was taken in my driveway in Ypsilanti!”

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

Annual dues are \$30 for individuals and families, \$20 per year for students and seniors (age 55+) and \$5 if you live outside of the Lower Peninsula. Membership entitles you online access to our monthly Newsletters and use of the 24" McMath telescope (after some training). A mailed copy of the newsletter can be obtained with an additional \$18 annual fee to cover printing and postage. Dues can be paid by PayPal (contact the treasurer to find out how) or by 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 \$65.90/2 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

Newsletter Contributions

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

Telephone Numbers

President:	Charlie Nielsen (734) 747-6585
Vice President:	Adrian Bradley (313) 354 5346
	Jim Forrester (734) 663-1638
	Joy Poling
	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



University Lowbrow Astronomers



Member Club



Astronomical League Member Society
#201601, Great Lakes Region

University Lowbrow Astronomers
P.O. Box 131446
Ann Arbor, MI 48113

STAMP