

UNIVERSITY  
LOWBROW  
ASTRONOMERS

# NEWSLETTER

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## Lowbrow Corner

Greetings, fellow members. Welcome to another edition of the Newsletter.

In case any of you haven't heard, the big news was last month's officer elections for the coming year. Returning for a second term are Jim Cypser as our beloved president in a narrow victory and Doug Nelle as our industrious observatory director. The new officers are Terry Moyer as treasurer, Brian McGraw as newsletter editor, and Peter Alway as secretary.

Let us not forget the outgoing officers, Jeff Ziehm, Don Luttermoser, and Erin Stewart. Their contributions to the club are greatly appreciated.

The other big news was Astronomy Day on May 9. Many intriguing activities were planned, but, while it wasn't a total failure, lack of enthusiasm (and lack of sunshine)

contributed to a somewhat less than successful overall presentation. Oh well, there's always next year...

This brings up an important issue with the club- we need more participation from members. When you get involved with club activities, you have fun. Or you can think of something the whole club might like to do or hear about. And it isn't hard to get involved, either. As newsletter editor I ask anyone who wants to write something about space or astronomy or whatever to submit articles to me. If you have any questions or ideas about the newsletter, then by all means see me or call me. You can also bring up ideas with any of the other officers.

That's all from me for now. Stay tuned for exciting changes to come in the Newsletter!



### **The Young Galileo Speaks by Ray Bradbury**

O child, they said, avert your eyes.  
Avert my eyes? I said, what, from wild skies  
Where stars appear and wheel  
And fill my heart and make me feel as if I might  
This night and then another and another  
Live forever and not die?  
Turn off my gaze, shut off my will and soul from this?  
This fiery bliss and joy which tempts me to steal forth  
At two a.m. and lie upon the lawn,  
A boy alone with Universe  
With song and verse of God spelled overhead  
For me to read and know and sing;  
Not know all this, go blind?  
Why, God minds me to be so. He put the bright sparks in my blood  
Which spirit, lighten, flare and frighten me to love.  
Small sparks, large Sun—  
All one, it is the same.  
Large flame or small  
I know and keep it all in eye, in heart, in mind.  
The flavor of the night lies on my tongue. I speak it so  
That others, uninviting of themselves, abed, not brave, may know  
What this boy knows and will forever know:  
The Universe is thronged with fire and light,  
And we but smaller suns which, skinned and trapped and kept  
Enshrined in blood and precious bones,  
Hold back the night.

WHAT'S UP

5/22/81 - 6/26/81

All times are E.D.T.

- May 22 Europa disappears behind Jupiter, at 12:50 a.m. on the 23rd.
- Sat. 23 Io starts to cross Jupiter's disk, 4:55 a.m.
- 24 About now is the best time to see Mercury. Look for a fairly bright, star-like object 10 degrees above the west-northwestern horizon about half an hour after sunset. 10 degrees is about the angle covered by your fist held at arm's length.
- 25
- 26 Moon at last quarter, rises about midnight.
- 27
- 28 Try finding Uranus with your unaided eyes--once the moon has set.
- 29 Observing at Peach Mountain with the 24-inch and possibly other telescopes--if it's clear or may clear up later. U-M Astronomy Dept.'s Visitors' Night with Richard L. Sears on "Stellar Energy Sources and Evolution" plus a movie, The Universe From Palomar. 8:30 p.m. in auditorium B, Angell Hall. If it's clear afterwards you can look through the telescopes on the fifth floor of Angell Hall. The time, place and telescope open house also apply to the June 5 and June 12 Visitors' Nights.
- Sat. 30 Another chance to use the 24-inch telescope and relatively dark skies of Peach Mountain on a weekend near the new moon! Once again, don't show up if it's cloudy and expected to remain that way. Europa disappears behind Jupiter, 3:16 a.m.
- 31 Venus may be spotted by a sharp-eyed observer, very low in the west-northwest about half an hour after sunset. For the next several months the brightest planet seen from Earth (unless you consider the moon a planet in it's own right--after all, it may be larger than Pluto) will climb higher and higher into the evening sky.
- June 1
- 2 Moon new
- 3
- 4
- 5 Visitors' Night with Hugh D. Aller on "Radiojets" plus a movie, Earth Space - Our Environment. Another Angell Hall telescope open house if it's clear or sort of clear. Observing at Peach Mountain. Call Doug Nelle (663-2080) or Jim Cypser (995-0204) if you're not sure if anyone's going to be out there.
- Sat. 6 Observing at Peach Mountain. Venus passes 1 minute of arc north of the center of open star cluster M35 at 10:00 a.m. Look for them in the evening, 16 degrees east of the sun.
- 7
- 8
- 9 Moon at first quarter, sets about midnight. Mercury and Venus are close together this evening. This morning they were separated by only 1.7 degrees.
- 10
- 11
- 12 U-M Astronomy Dept.'s Visitors' Night: to be announced.

- Sat.  
June 13 Ganymede disappears behind Jupiter at 3:58 a.m. on the 14th.  
14 A comet (which will eventually become spectacularly bright and thrill the inhabitants of Earth) is discovered by two amateurs in different parts of the world. Named after its discoverers according to the rules, it becomes Comet Perry-Yoddick.
- 15 The best meteor shower of June, the June Lyrids, will be washed out by the nearly-full moon.
- 16  
17 Moon full, in sky just about all night.  
18  
19 Astrofest with Jim Loudon, "Space Shuttle: First Flight and Beyond" with latest films, tapes, etc. There may be solar observing before Astrofest and views of the moon, Jupiter and Saturn to be had afterwards through telescopes of the University Lowbrow Astronomers--weather permitting.
- Sat. 20  
21 Peach Mountain Radio Telescope Open House, 2:00 - 4:30 p.m. regardless of weather. For more info: see U-M Astronomy Schedule 29, "Peach Mountain Observatory".  
Summer solstice, 7:45 a.m.
- 22 Mercury at inferior conjunction; moves into morning sky.  
23  
24 Uranus (magnitude 5.8) passes very close (1.7 minutes north of) the star 41 Librae (magnitude 5.5).
- 25 Moon at last quarter, rises about midnight.  
26 June meeting of University Lowbrow Astronomers, 8:30 p.m.  
5006 Angell Hall.

If you know of some kind of event (either celestial or terrestrial) which you think should be included in future editions of What's Up, talk to Jim Cypser (995-0204).

April 1981 Meeting.

# NEW NEWS

Ath the last lowbrow meeting, the following memorable events occurred:

Jim Cypser brought the Viking Fund to the Members' attention. The fund is a way for individuals to contribute directly to the operation of the underfunded Viking I spacecraft still operating on the surface of Mars. If you believe that planetary exploration is a worthwhile endeavor, you can put your money where your mouth is by sending at least \$1<sup>00</sup> to: The Viking Fund, 357 Saratoga Avenue, Santa Clara, Calif, 95050. Also, the 'Halley Fund', at the same adress, may be of interest to those who would like to see an American probe visit Halley's Comet during its once-in-a-lifetime appearance in 1986. The success of the Shuttle doesn't mean financial health for the exploration of the solar system.

Signup sheets were passed around for Astronomy Day, observing sessions, and public observing after Astrofest.

New officers were elected. Jim Cypser (995-0204) is again the president; Doug Nelle (663-2080) is still the observatory 'boss'. New officers are: Terry Moyer (662-0417), Treasurer; Peter Alway (662-1917), Secretary; Brian McGraw (662-1917), Newsletter Editor. If you have any questions about the club, or just a sudden urge to go observing with the 24", Jim is a good person to call, since he at least should be able to someone if he can't help you. Doug keeps a set of keys to the observatory for lending to those who know how to use the 24" telescope.

Peter Alway  
Secretary

Stolen from Aviation Week & Space Technology and Science News

By Plagiarism Pete Alway

## SHUTTLE TRIVIA

During the launch of the Shuttle Columbia, not everything was perfect. Bits of insulation or ice were seen falling on the windshield of the orbiter, leaving white streaks on the windows. The astronauts could see this happening for the first two minutes of the flight, but the straks remained until they were somehow removed by the heat of re-entry. (The insulation mentioned here is from the disposable External Tank, not the orbiter itself.) Once in orbit, the orbiter's small maneuvering rockets were annoyingly loud-- "like a muffled howitzer!" Although this system worked satisfactorily, vertical translation was quirky: when the craft was supposed to 'rise' upward, the nose would rise faster than the tail. this would automatically stop the upward motion ~~and~~ while the spacecraft tried to straten itself out. This caused the craft to rock back and forth continuously while it moved. On the brighter side, The unexpectedly high performance of the solid fuel boosters has increased the payload capacity of the shuttle by about 1000 pounds.

The next shuttle flight, perhaps as early as Sept. 25, will be loaded with 3 tons of scientific stuff. (The first flight had none) There will be 6 experiments studying the Earth's life, land, oceans, and atmosphere, and one studying plants in weightlessness