The Meteor
The Newsletter of the Astronomical Society of Greenbelt
May 2009

*The Meteor* is the official publication of the Astronomical Society of Greenbelt, Greenbelt, MD. Articles & other contributions are welcome. Membership in the Astronomical Society of Greenbelt is open to anyone interested in astronomy. The Astronomical Society of Greenbelt is a not-for-profit community-based organization with the goal of encouraging public interest in science & education in general, astronomy in particular. More detailed information on our club’s activities & organization can be found elsewhere at our [website](#).

The editor of this newsletter, Craig Levin, can be contacted at clevin AT ripco.com. Unless specified otherwise, all items in this newsletter were written by the editor.

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**Editor’s Note**

The **100 Hours of Astronomy** were a tremendous success for us. I saw a lot of proud & happy faces at the dedication. Smiles continued to abound, along with cries of amazement, when we showed our guests the showpieces of the sky, including the Orion Nebula, the Pleiades, the Double Cluster, Saturn, & the Moon. A larger account of April’s activities follows our calendar for May.

In May, the excitement continues: **Astronomy Day**, which is also the 30th anniversary of the opening of the Owens Science Center, falls on the 2nd. The last sky show that the Owens will present for this school year will be on the 8th.

I am always looking for contributions to our newsletter. Pictures are as welcome as articles!

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**Elected officers for 2008-2009**

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<thead>
<tr>
<th>Office</th>
<th>Name</th>
<th>Email Address</th>
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<tbody>
<tr>
<td>President</td>
<td>Martha Gay</td>
<td>marty_lou AT comcast.net</td>
</tr>
<tr>
<td>Vice-President</td>
<td>Glory Houck</td>
<td>N/A</td>
</tr>
<tr>
<td>Secretary</td>
<td>Elizabeth Levin</td>
<td>elevin AT ripco.com</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Sue Bassett</td>
<td>wb3enm AT amsat.org</td>
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## Notable Events

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<tr>
<th>Sunday</th>
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<td>2</td>
<td>Astronomy Day at the Owens 1:30-8:30</td>
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<td>8</td>
<td>Sky show at the Owens (Last one before Summer Vacation!) 7:30</td>
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<td>15</td>
<td>16 Star Party at the Greenbelt Public Observatory 8:30</td>
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<td>24/31</td>
<td>31:Sidewalk Astronomy at Roosevelt Center</td>
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<td>27</td>
<td>28 Business Meeting at the Owens 7:30</td>
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<td>29</td>
<td>30 Star Party at the Greenbelt Public Observatory 9:00</td>
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### Star Party & Business Meeting Reports

**April 2-5: 100 Hours of Astronomy:** Our celebration of the 100 Hours of Astronomy began on its first day, April 2, with our delayed business meeting featuring a presentation on space weather by Dr. Michael Shay of the University of Delaware. Dr. Shay is particularly interested in solar flares & coronal mass ejections, & their interactions with our Earth's magnetic field. After giving a quick rundown on the basic facts about plasma & solar flares, he talked about what really interests him-monitoring the Sun & Sun-Earth magnetic interactions, especially the phenomena known as magnetic reconnections. Magnetic reconnections happen when a blob of plasma is ejected from the Sun & hits the magnetic field of our Earth. The blob has its own magnetic field, which it inherited from the Sun upon its departure. Upon collision with our Earth's magnetosphere, the blob's field is stretched, & ultimately "snaps", spitting the plasma into our Earth's magnetosphere & causing magnetic storms & the Northern Lights on the surface of our Earth. Dr. Shay talked about the different methods of investigating the behavior of plasmas (lab work plus observations of plasma in outer space) & the various space probes.
currently studying the Sun's behavior. He also discussed the practical aspects of knowing more about the Sun & Sun-Earth magnetic interactions, especially since powerful solar flares can damage satellites & electrical apparatus down here & potentially give astronauts radiation poisoning, especially once NASA returns to the Moon & sets its sights on a crewed Mars mission, as neither the Moon nor Mars have magnetic fields which blunt the force of a solar flare.

April 3 was a rainy day. Fortunately, we didn't have anything scheduled.

April 4 was one of the clearest days I have seen since I moved to the DC area, although it was a bit breezy. About 30 people were at the dedication of the Greenbelt Public Observatory, including Judith Davis, the mayor of Greenbelt, & 2 aldermen (Leta Mach & Konrad Herling). Speeches were made by Martha, George, Doug, the 3 city dignitaries, & Mr. Bob Doyle, who was speaking for Ingrid Turner, who couldn't be present. After the speeches were delivered, a drawing for a new telescope was held, & the mayor was the winner. It is hoped that she will sometimes find some time in her busy schedule to come observe with us. Many of the assembled people hadn't seen the observatory before, & they took the opportunity to tour the observatory.

The great clarity of the sky continued after sundown, & the wind died down. Many people, some of whom had attended the dedication, came by to view Saturn & other celestial showpieces through the observatory’s telescope & through the optical arsenal gathered on the ballfield & the mound upon which the observatory is placed.

On April 5, I went to the visors’ center at Goddard to lend a hand to the outreach effort of the Goddard Astronomy Club. George was already there, as a member of both organizations. About 10 or 15 people came for advice & for several presentations. One, on observing the planets & bright stars during the daytime, was particularly interesting for both newcomer & veteran alike. Later, after sundown, as the clear weather was beginning to be marred with clouds, telescopes & people came to the observatory & set up shop. Although we had our bouts with clouds & Murphy’s Law (“It’s over here...where the clouds are, but if you’ll give me a moment, I can show you...no, that’s in the clouds too. How about the Moon?”), I suspect that we enlightened nearly as many people on Sunday night as we did on Saturday night.

April 18: Star Party: I regret that I was unable to make it to the star party that evening. Fortunately, a number of people, including Michael Chesnes, the editor of the NCA's Star Dust, Martha, & Doug, kindly provided me with brief accounts of how it went. The night before, as the presenter of the Owens' monthly public sky show, I told the audience that they were welcome to join us at our star party. It appears that some of the people who were at the sky show also went to our star party.

About 24 people were there, in spite of the clouds that eventually covered everything by 10. In addition to the observatory's Celestron, a Dobsonian telescope was on hand. Our guests got to see Saturn, Sirius, the Beehive cluster, & Mizar & Alcor. Crowd control was provided by Doug's cousin Erin. Tom & Jeffrey provided observational aid.

April 30: Business Meeting: The news from this meeting will appear in the next issue, as they took place after the press date of the Meteor.

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Astronomy Day & the 30th Anniversary of the Owens Science Center

May 2 is the 30th anniversary of when the Owens Science Center opened its doors to serve the people of PG County. It is also Astronomy Day. We have been requested to come up with presentations for the
people who will visit the Owens in order to observe its anniversary & Astronomy Day. Also, we should be ready to do some solar sidewalk astronomy, assuming the weather is suitable.

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**IYA 100 Hours of Astronomy, SN 2009dd & Early Lyrids**

by G.W. Gilba

Many "IYA 100 Hours" events that I participated in went well. On Saturday, April 4th, we had about 30 folks for the dedication of the City of Greenbelt Observatory, including the Mayor of Greenbelt, Judith Davis, two City Council members, Konrad Herling, & Leta Mach, a representative for the Maryland State Council member for P.G. County, Ingrid Turner, a couple older retired former NASA/GSFC folks, several ASG life members, & Dr. Jerry Bonnell (Mr. APOD). The mayor of Greenbelt spoke about seeing the stars as a little girl, & the increasing light pollution. She also was the winner of the Telescope Door Prize, which I was assured was not rigged! ASG co-founder Doug Love & I gave brief talks on the ASG history. ASG president Martha Gay gave a brief talk, & also mentioned that all of the current ASG officers are now women! She also read a message from the major observatory benefactor, Dr. Jaylee Mead, who couldn't attend.

The star party on Saturday night had about 100 people show-up. We had about 20 telescopes set-up on the ballfield, & there was always a long line at the observatory door to look through the C-14 telescope. The best telescopes were a 6-inch Astrophysics refractor, a C-11 SCT, and a 16-inch Dobsonian. NASA ASD EPO material was distributed.

The Telescope Tune-up & Star Party workshop at the NASA/GSFC Visitor's Center arranged by the NASA/GSFC ASD went well on Sunday afternoon from 2pm to 4pm. I gave a talk on Finding Things with a Telescope, George Privon, a graduate student in Astrophysics at the University of Virginia, gave a talk on Observing the Moon, GAC president Nels du Toit gave a talk on Finding Objects in the Daytime with a Telescope, & Aleya Van Doren, of NASA SDO EPO, gave a talk on How to Throwing a Star Party. A few members of the ASG & GAC were also there to assist. There was about 25 people there & 7 telescopes. Free NASA ASD EPO material was also passed out, & Door Prizes were given away.

The star party on Sunday night had fewer folks, probably because of the weather (partly cloudy) & it being a work night for many. Still, about 50 showed up to look through the 6 telescopes set-up. Interestingly, there were more young people who attended than on Saturday, & some of them were very enthusiastic about astronomy & NASA. The best telescopes that night was the same 16-inch Dobsonian & 11-inch Celestron SCT that were there Saturday night.

Lynne and I were able to escape from the light pollution the next favorable weekend when we went up to our cabin at Mathias, West Virginia April 18th. We had partly cloudy to mostly clear conditions. Early in the evening, we saw the SN in the spiral galaxy NGC 4088, which was around 13.5 magnitude in her 8-inch SCT. Later, between some periods of clouds, I was able to get in two hours of meteor watching.

From 5:35 to 7:35 UT I was able to see 22 meteors, including 3 early Lyrids, 2 Antihelions, & 1 Xi Cygni. The best meteor of the session was the last one, which was a nice 0 magnitude blue-green sporadic seen at 7:35 UT. It looked like it had a corona surrounding the head, which was beautiful. Later, I was able to get some good looks at the Milky Way. I was impressed by the Dark (Barnard) Nebulae I could see with our 12x63 binoculars. It looked like marble sweeping from Cepheus across to Aquila! It was a glorious sight.