

The Focal Point

The Atlanta Astronomy Club
Established 1947
May 2013

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Editor: Tom Faber

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May General Meeting & Elections

Join us for the May meeting of the Atlanta Astronomy Club on Friday, May 17th at 8PM. Our May meeting talk will be about exoplanets. Our speaker, Melissa A. Hutcherson is a student at Agnes Scott College and has been involved in an ongoing research project investigating exoplanets. We will also have the election of club officers and Board members at the May meeting. Most of the officers plan to run for another term but if you are interested in running for an office or Board position please contact club President Richard Jakiel. Our May meeting will take place at the Atlanta Freethought Society (AFS) building in Smyrna. Refreshments will be provided starting around 7:30PM. Directions to the meeting at The Atlanta Freethought Building: Take I-285 to exit # 16. Go south (in towards Atlanta) about half a mile. Turn right on to North Church Lane. The first Building you see on the left is it (Looks like a small brick church). The street address is 4775 North Church Lane S.E., Smyrna 30080.

The Program:

Exoplanetary Detection - Within the last 20 years, observational missions such as Kepler have shown that planets orbiting stars outside our solar system are quite common. In the Milky Way alone it is estimated that there are hundreds of billions of exoplanets, roughly at least one planet for every star in the galaxy. For this reason, extrasolar planets have quickly become one of the most popular topics in astronomy today. Why though, are exoplanets so abundant? How do they form and how do we detect them? Along with answering these questions, the lecture will focus on my research in exoplanetary detection and the process by which they are observed. Additionally, the talk will touch on some of the implications for Earth-like planets in the habitable zone and the possibility of extraterrestrial life.

Our Speaker:

Melissa is an undergraduate studying Physics at Agnes Scott College. Her current research involves observing exoplanetary transits using optical telescopes to help confirm the existence of planets orbiting other stars. She

March was Membership Renewal Month

If have not yet renewed your AAC membership for 2012 please send it to Sharon as soon as possible! Thank You for your support of the AAC!



is also involved in massive star formation research which focuses on using the EVLA (Expanded Very Large Array) for radio observations at 1.3 cm wavelengths in order to detecting flux variations in ultracompact and hypercompact HII regions near the galactic center in Sagittarius B2. This summer Melissa will be doing high energy particle physics research at the University of Michigan, focusing specifically on the KOTO experiment, where she will travel to Tokai, Japan to the main experimental facility for a week. Additionally, in the spring of 2014 she plans to study abroad in Spain and complete an engineering internship offered through *La Universidad de Carlos III de Madrid*. After completing her undergraduate career she plans to pursue a Ph.D. in applied physics.

Future Programs:

In order to keep our programs interesting and relevant I need your help. Please let me know (Mark Banks at: programs@atlantaastronomy.org) of any subjects you may be interested in for a future program. Also, if you or someone you know would like to do a program for us please contact me.

Upcoming AAC Meetings:

Our meetings will usually be held on the 3rd Friday of the month. Future meeting dates are June 21, July 19, Aug 16, Sept 20th, Oct 18th, Nov 15th, Dec date TBA. Locations TBA.

April AAC Meeting Minutes

By Pixie Bruner, Recording Secretary. Photos by Tom Faber unless noted.

The April meeting of the AAC was a special meeting that was co-hosted by the Tellus Science Museum. Julian Gray, the curator of the museum shared the closed exhibit Spin-Offs with us. Spin-Offs is a exhibit of the consumer products we use that were developed as part of NASA and shows how NASA makes the human condition better and deserves public support. Spin-Offs is also a fun part of the NASA website to explore and enjoy and is both fun and educational. The AAC then took our scopes out and shared the skies over Tellus with the Tellus observatory acting as the sun for the scope solar system showing the night sky to attendees who came out for this wonderful celebration of Astronomy Day.

The next meeting will be at the AFS building on Friday May 17. A Board Meeting will be scheduled soon. We warmly wish to welcome the new members and remind old members that dues were due in March. The website and the NASA Night Sky Network site has many opportunities on the schedule for volunteerism and DSO (Dark Sky Observing) and we encourage everyone to get involved as they can. In May, elections for club officers and the Board will be held so please consider serving the club as an officer or Board member, it is fun, educational and not very time-intensive but sharing your passion for the skies helps make the AAC a great organization and without volunteer officers, we cannot reach for the skies. We wish us all clear ones!



Our host, Tellus astronomer David Dundee (above), addresses our meeting before Julian Gray presents his talk (below).



After our club meeting we set up scopes around the Tellus Observatory. We showed the visitors the sun and moon before dark, then Jupiter, Saturn, and a few deep sky objects after it got dark. 2nd photo right column by Kat Faber.



Charlie Elliott Chapter Outreach

By Theo Ramakers, Outreach Coordinator

<http://ceastronomy.org/tramakers>

The Chapter had 12 outreach events scheduled for April, of which 3 are scheduled to take place after this report has been written. We did a number of repeat locations this month. We went back for the second time to Scott Elementary School in Atlanta for their second KITES Festival (STEM), Panola mountain was our second event for this year, and 6 of us went for the fourth year, so Anna Ruby Falls (photo bottom) could have their fourth annual Solar Observing Day which was covered by the White County News with a nice article. The second KATES day event at Charlie Elliott (photos right middle & bottom) gave children who lost a parent, brother or sister a chance to learn a lot about astronomy and found out what the Sun looks like through eclipse glasses and a solar scope. For Astronomy Day we organized, or were involved in 3 events: The Sun over CE for KATES club, Fernbank (right top) asked us to setup some solar scopes to help celebrate their Astronomy day, and the Gwinnett Parks Department asked us to come to Little Mulberry Park in Dacula for a Meteor Madness and Campout session. A new and very enthusiastic school asked us this month to come for a presentation on Curiosity and a Solar day event: Veterans Memorial Middle School in Covington (photo below). After the event, the kids send us some great letters and notes to thank us for coming. We receive these sometimes, but these were exceptional. Thanks students from Veterans Memorial!! An event for a Spring break camp in Centerville concludes the list for April.

Thanks for participating and clear skies!



Images by Chuck Painter

Chuck made these images at the March 2013 Zombie Party. Both images were taken with my usual set up:

8" Astrotek Ritchie-Chretien

Orion ST-80 guidescope

Orion Starshoot Pro Camera

Orion Starshoot autoguider

Atlas EQ-G mount

Image captured with Maxim DL (limited edition) and guided with PHD (Push Here Dummy)

Image processed with Nebulosity and PixInsight



The M42 image combines 18 - 30 second exposures with 12 - 10 minute exposures. The goal was to capture the faint outer details without frying the core. The usual equipment was used. I continue to be amazed at the processing capabilities of the software, PixInsight.



This image shows the Horsehead nebula and was taken during the brief clear window we had on the Saturday night. I managed to get 60 minutes on this one, however it's still kind of noisy. There's also a diffraction spike from Zeta Orionis in the upper left of the image. Nonetheless, there's some nice detail.

ALCon 2013 — Call for Papers

Interested parties are hereby invited to submit papers on the astronomy-related topics of their choice for presentation at the Astronomical League's 2013 convention, ALCon2013, being held here in Atlanta, Georgia, July 24 through 27. The Atlanta Astronomy Club is working with the Astronomical League in presenting this year's event. Papers will be presented on Wednesday, July 24, and Thursday, July 25, at the Fernbank Science Center Jim Cherry Planetarium; the location is equipped with a full array of audio-visual equipment. A total of 22 time slots are available. Participants are encouraged to submit research papers, presentations, and experience reports concerning various aspects of Earth-based observational astronomy. Suggested topics for papers and presentations include the following:

- New or ongoing observing programs and studies, specifically, how those programs were designed, implemented and continue to function.
- Results of personal or group astronomical studies.
- New or ongoing activities involving astronomical instrumentation, construction or improvement.
- Challenges faced by Earth-based observers such as changing interest levels, deteriorating observing conditions brought about by possible global warming, etc.

The preferred format is Microsoft PowerPoint, though 35mm slides are also acceptable. The final presentation should not exceed 20 minutes in length, to be followed by no more than five (5) minutes of questions (if any) from the audience. A hard-copy version of the paper should be made available for future web site publication. Two consecutive 20-minute sessions can be scheduled if the subject material so requires.

Please submit by June 15, 2013, the following:

- Title of the paper being presented.
- A four- or five-sentence abstract of each paper.
- The format in which the presentation will be.
- A 100-word biography and a recent photograph of the presenter for posting on the ALCon 2013 website and inclusion in the printed program guide.

Address all materials to:

ALCon 2013

c/o Ken Poshedly

1741 Bruckner Court

Snellville, Georgia 30078 USA

E-mail is the preferred method for contact: ken.poshedly@alpo-astronomy.org

Besides the daily technical presentations, there will several optional side-trips

- A Thursday evening trip to the AAC's other observing site at the Deerlick Astronomy Village well east of Atlanta.
- A Friday night "Star B-Q" at the nearby Agnes Scott College Bradley Observatory, which is where the AAC was founded.
- A midday Saturday venture to the AAC's William Barber Observatory site.

Lodging for out-of-towners will be at the nearby Emory Conference Center Hotel, which is lowering its standard room rate considerably for attendees of ALCon 2013. Registration and other fees are included in the event registration form.

The Astronomical League is coming to Atlanta!



ALCON 2013 ATLANTA

Summer Skies, Southern Hospitality

July 24-27, 2013 • Atlanta, Georgia

Location: Fernbank Science Center

Host Organizations: Atlanta Astronomy Club, Astronomical League

Partnering Organization: Association of Lunar and Planetary Observers (ALPO) • This year, ALPO presentations will be mainstreamed with League talks



Accommodations...

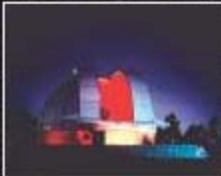
Emory Conference Center Hotel

- Shuttle service between hotel and presentations at Fernbank Science Center and Agnes Scott College Bradley Observatory for those without transportation
- Be sure to ask for the Astronomical League rate. 1-800-933-6679, emoryconferencecenter.com/index.cfm
- Saturday night's Awards Banquet



Primary Venue: Fernbank Science Center

- Talks held in 70 foot planetarium
- Evening shows with Zeiss Mark V projector coupled with various special effects projector
- 0.9 meter Cassegrain reflector in the Ralph Buice Memorial Observatory
- Vendor displays



Atlanta Attractions

- World of Coca-Cola
- Georgia Aquarium
- Zoo Atlanta
- Inside CNN
- Atlanta Botanical Garden
- Olympic Games venues



Conference Speakers...

Chris Hetlage, Deerlick Astronomy Village, a distinctive dark sky community.

Tim Puckett, Supernovae Research



Saturday night's Awards Banquet Keynote Speaker:

Charles Wood, Sky and Telescope Lunar 100 creator

Star BQ, Friday, July 26, Agnes Scott College Bradley Observatory:

Bradley Observatory Tour; 30-inch Beck Cassegrain; Planetarium Presentation

Other ALCon 2013 Excursions

- Atlanta Astronomy Club's Villa Rica Observatory; Full size roll-off roof observatory with 20-inch Newtonian reflector
- Atlanta Astronomy Club's observing site at the Deerlick Astronomy Village



Check www.ALCon2013.astroleague.org for more information as it becomes available.



The Astronomical League is coming to Atlanta!

ALCon 2013 Registration Information—July 24-27, 2013

Mail completed form with your check made payable to ALCon 2013 to:
Astronomical League, ALCon 2013 Registration,
9201 Ward Parkway, Suite 100, Kansas City, MO 64114

Please use one form for each attendee. One check is acceptable for your group. You may also register online at www.alcon2013.astroleague.org and make remittance with PayPal.

First Name: Last Name:

Name and Title for ID badge:

E-mail Address:

Mailing Address:

Address, Line 2 (if needed):

City, State or Province and ZIP or Postal Code:

Country: ALPO Member?

Daytime Phone Number: Alternate Phone Number:

Astronomical Club, Society, or Organization Affiliation:

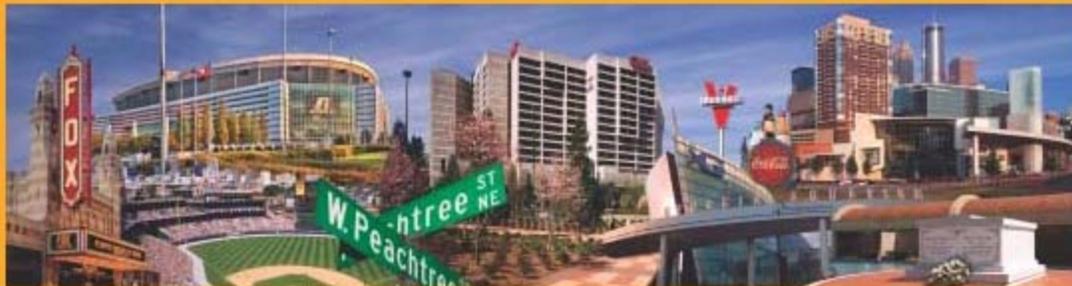
You may make your room reservations at the Emory Conference Center Hotel by calling 800-933-6679. Be sure to ask for the Astronomical League ALCon 2013 special rate before the room block is fully booked. Free parking and free Internet.

The organizers reserve the right to make such changes to the program and speakers as may be necessary due to conditions outside of their control.

Early Registration Fees (after July 8, add \$20)

Please check each item you wish to include in your registration and enter the amount in the box on right.

	Amount
Individual 2 or 3 day registration: \$50	<input type="text"/>
Single day registration: \$35	<input type="text"/>
Couples 2 or 3 day registration: \$75	<input type="text"/>
Students: \$20	<input type="text"/>
Children younger than 15 years of age accompanying adults registering: free	
Shuttle bus from Emory Conference Center Hotel and the Fernbank Science Center (for those needing transportation), 8:15 a.m. to 11:15 a.m. and 2 p.m. to 5 p.m.	
\$20 Wednesday <input type="checkbox"/> \$20 Thursday <input type="checkbox"/> \$20 Friday <input type="checkbox"/>	<input type="text"/>
Boxed Lunches: Choice of Ham and Swiss, Turkey and Cheddar, or Mediterranean Veggie sandwiches with a pickle spear, a half-sized Jumbo Cookie, chips, and water bottle: \$9. Check one for each day. Wednesday: Ham and Swiss <input type="checkbox"/> ; Turkey and Cheddar <input type="checkbox"/> ; or Mediterranean Veggie <input type="checkbox"/> Thursday: Ham and Swiss <input type="checkbox"/> ; Turkey and Cheddar <input type="checkbox"/> ; or Mediterranean Veggie <input type="checkbox"/> Friday: Ham and Swiss <input type="checkbox"/> ; Turkey and Cheddar <input type="checkbox"/> ; or Mediterranean Veggie <input type="checkbox"/>	<input type="text"/>
Friday night Star BQ (Please select one) Pan Roasted Chicken Breast with mushroom ragout \$32 <input type="checkbox"/> Tender Beef Brisket with a caramelized onion jus \$37 <input type="checkbox"/> Grilled Eggplant Steak with chick peas and feta cheese \$32 <input type="checkbox"/>	<input type="text"/>
Shuttle from Emory Conference Center Hotel to Star BQ at Agnes Scott College Bradley Observatory and return: \$20	<input type="text"/>
Saturday night banquet: 1. Vegetarian: Gnocchi with pesto cream, olive oil poached tomatoes, grilled zucchini and shitake mushrooms: \$45 <input type="checkbox"/> 2. Pan seared sage and garlic infused chicken breast served with red onion marmalade on creamy polenta: \$45 <input type="checkbox"/> 3. Grilled bourbon glazed boneless pork loin with mustard braised greens and smoked cheddar mashed potatoes: \$45 <input type="checkbox"/> Please select one	<input type="text"/>
ALCon merchandise Silk-screened T-shirt, White <input type="checkbox"/> ; or Royal Blue <input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> L <input type="checkbox"/> XL <input type="checkbox"/> XXL <input type="checkbox"/> XXXL <input type="checkbox"/> : \$20 Embroidered polo shirt, White <input type="checkbox"/> ; or Royal Blue <input type="checkbox"/> Mens: S <input type="checkbox"/> M <input type="checkbox"/> L <input type="checkbox"/> XL <input type="checkbox"/> XXL <input type="checkbox"/> XXXL <input type="checkbox"/> : \$25 Womens: S <input type="checkbox"/> M <input type="checkbox"/> L <input type="checkbox"/> XL <input type="checkbox"/> XXL <input type="checkbox"/> XXXL <input type="checkbox"/> : \$25	<input type="text"/>
Help the League help amateur astronomy by making a tax deductible donation	<input type="text"/>
Total Enclosed:	<input type="text"/>



DAV Memorial Weekend Picnic

Mark your calendars - the 2013 Deerlick Astronomy Village Memorial Weekend Picnic will be held on Sunday May 26th at 5 PM!

Time: Grilling, socializing & set up will start ~4 PM. We hope to chow down about 5 PM. There will be an Open House from 7:30-8:30 PM so that guests may tour the AAC clubhouse and some of the personal Deerlick observatories before dark.

Where: The DAV pavilion on Grier's Field, Deerlick Astronomy Village, Sharon, GA (located at the end of Aaron Grier Road, off of Double Wells Road - map available online, see below).

RSVP: Anytime between now & Thursday May 23rd. This event is open to anyone interested in DAV.

Potluck: Please bring a favorite side dish to share (appetizers, veggies, salads, fruit, and desserts). See the list below for suggestions. If you RSVP by May 23rd, we'll have some BBQ & burgers waiting for you!

How to RSVP: Please email Karen at: picnic@deerlickgroup.com by Thursday May 23rd with:

- (1) How many family & friends will be attending the picnic and
- (2) What you'd like to bring to the potluck.

If you would like to camp on Grier's Field during the weekend, camping Sunday night after the picnic is free! There will be a \$5 camping fee per person per night for those who would like to come early & camp on Friday and/or Saturday night. A full bath house is located on site. All of the usual Dark Sky rules will apply while camping at DAV. See www.deerlickgroup.com for details.

FOOD SUGGESTIONS

Bring any of the following suggested food dishes to serve 6-8: Your favorite potluck dish or family casserole; bucket of fried chicken; corn, green beans, other veggie dish; salads - pasta, marinated or tossed; fresh fruit or fruit salad; macaroni & cheese; chips, salsa or dip. No matter what folks bring, no one will go away hungry!

For a map to Deerlick Astronomy Village, see <http://www.deerlickgroup.com/PDF/DeerlickMap1.pdf>

Hope to see you at the picnic!

The **Atlanta Astronomy Club, Inc.**, one of the South's largest and oldest astronomical society, meets at **8:00 P.M.** on the **3rd Friday of each month** in the Parlor Room - Hitson Center in Sandy Springs, or occasionally at other locations or times. Membership fees are **\$30 (\$42)** for a **family or single person membership**. College Students membership fee is **\$15 (\$27)**. These fees are for a one year membership (\$12 per year extra charge to receive a printed *Focal Point* by mail).

Magazine subscriptions to *Sky & Telescope* or *Astronomy* can be purchased through the club for a reduced rate. The fees are **\$33** for *Sky & Telescope* and **\$34** for *Astronomy*. Renewal forms will be sent to you by the magazines. Send the renewal form along with your check to the Atlanta Astronomy Club treasurer.

The Club address: Atlanta Astronomy Club, Inc., P.O. Box 76155, Atlanta, GA 30358-1155. AAC Web Page: <http://www.AtlantaAstronomy.org>. Send suggestions, comments, or ideas about the website to webmaster@AtlantaAstronomy.org. Also send information on upcoming observing events, meetings, and other events to the webmaster.

Atlanta Astronomy Club Online

While this newsletter is the official information source for the Atlanta Astronomy Club, it is only up to date the day it is printed. So if you want more up to date information, go to our club's website. The website contains pictures, directions, membership applications, events updates and other information. <http://www.atlantaastronomy.org> You can also follow the AAC on Facebook by joining the AAC group, and on Twitter at <http://twitter.com/atlastro>.

AAC Officers and Contacts

President: Richard Jakiel President@AtlantaAstronomy.org

Program Chair: Mark Banks Programs@AtlantaAstronomy.org

Observing Chair/BoD Chair: Daniel Herron
Observing@AtlantaAstronomy.org

Corresponding Secretary: Tom Faber
Focalpoint@AtlantaAstronomy.org

Treasurer: Sharon Carruthers Treasurer@AtlantaAstronomy.org

Recording Secretary: Pixie Bruner
Secretary@AtlantaAstronomy.org

Board Chair: Daniel Herron, Observing@AtlantaAstronomy.org

Board: Brigitte Fessele, Contact info TBA

Board: David Lumpkin, Contact info TBA

Board: Steve Phillips sandsphillips@att.net

ALCor: Open - President@AtlantaAstronomy.org

Elliott Chapter Director: Larry Owens director@ceastronomy.org

Elliott Observing Supervisor: John Towne
observing@ceastronomy.org

Elliott Recording Secretary: Marie Lott mtlott@comcast.net

Elliott Coordinator: Alesia Rast Alesia_Rast@mail.dnr.state.ga.us

Elliott Webmaster: Theo Ramakers 770-788-0843
webmaster@CEastronomy.org

Elliott Outreach Coordinator: Theo Ramakers 770-788-0843
outreach@ceastronomy.org

Georgia Astronomy in State Parks: Sharon Carruthers
Treasurer@AtlantaAstronomy.org

PSSG Chairman: Peter Macumber pmacumber@nightsky.org

PSSG Co-Chair: Joanne Cirincione
starrynights@AtlantaAstronomy.org

Sidewalk Astronomy: Brad Isley
sidewalkastronomy@AtlantaAstronomy.org

Light Tresspass: Open - Contact Mark Banks if you would like to volunteer for this position

Woodruff Observ. Coordinator: Sharon Carruthers
Treasurer@AtlantaAstronomy.org

AAC Webmaster: Daniel Herron, Observing@AtlantaAstronomy.org

Calendar by Tom Faber (Times EDT/EST unless noted)

AAC Events are listed in BOLD

- May 9th, Thursday: New Moon.
- May 10-12th: Moon near Venus and Jupiter after sunset.
- May 11th, Saturday: **DSO at CE, CE Chapter Meeting, 5 PM.** Mercury at superior conjunction.
- May 17th, Friday: **AAC Meeting, 8PM at AFS.**
- May 18th, Saturday: Moon First Quarter.
- May 19th, Sunday: Mercury, Venus, and Jupiter in line.
- May 24th, Friday: Mercury closest to Venus. Moon occults Beta Scorpii.
- May 25th, Saturday: Full Moon.
- May 26th, Sunday: Close grouping of Mercury, Venus and Jupiter.
- May 31st, Friday: Moon Last Quarter. Mercury, Venus, Jupiter.
- June 8th, Saturday: **CE Chapter Meeting, 5 PM DSO at DAV.** New Moon.
- June 9th, Sunday: Very thin crescent moon in west after sunset.
- June 10th, Tuesday: Moon near Mercury & Venus.
- June 12th, Thursday: Mercury at greatest elongation east.
- June 15th, Saturday: **GASP at Tugaloo State Park 9 PM.**
- June 15th-21st: Mercury near Venus.
- June 16th, Sunday: Moon First Quarter.
- June 21st, Friday: **AAC Meeting, 8PM at AFS.** Solstice at 1:40AM.
- June 23rd, Sunday: Full Moon.
- June 30th, Sunday: Moon Last Quarter.
- July 1st, Monday: Pluto at opposition.
- July 5th, Friday: Earth at Aphelion.
- July 8th, Monday: New Moon.

For more event listings see the calendar at www.atlantaastronomy.org

Atlanta Astronomy Club Listserv

Subscribe to the Atlanta Astronomy Club Mailing List: The name of the list is: AstroAtlanta. The address for messages is: AstroAtlanta@yahoogroups.com . To add a subscription, send a message to: AstroAtlanta-subscribe@yahoogroups.com . This list is owned by Lemmy Abbey.

Focal Point Deadline and Submission Information

Please send articles, pictures, and drawings in electronic format on anything astronomy, space, or sky related to Tom Faber at focalpoint@atlantaastronomy.org. Please send images separate from articles, not embedded in them. Articles are preferred as plain text files but Word documents or PDF's are okay. You can submit articles anytime up to the deadline. **The deadline for June is Friday, May 24th. Submissions after the deadline will go in the following issue.**



FIRST CLASS



www.beclage.com



We're here to help! Here's how to reach us:



ATLANTA ASTRONOMY CLUB
EST. 1947

The Focal Point

Newsletter of The Atlanta Astronomy Club, Inc.

FROM: Tom Faber
2206 Treeridge Parkway
Alpharetta, GA 30022

Atlanta Astronomy Club
P.O. Box 76155
Atlanta, GA 30358-1155

www.atlantaastronomy.org

On Twitter at <http://twitter.com/atlastro>