November 2017

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John Wingard - Secretary/Treasurer - Auburn Astronomical Society - jwin1048@gmail.com

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December Meeting Notice

The next meeting of the Auburn Astronomical Society will be Friday, December 1, 2017. We will meet at 7:45 PM CT in Room 215 of Davis Hall (Aerospace Engineering) on the AU campus. More specific information on the location of the building and room can be found on the AAS web page at

http://www.auburnastro.org

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Important! Possible Meeting Changes - FEEDBACK REQUESTED!

Recently, we have been discussing the possibility of changing from our current schedule of monthly club meetings to having only four quarterly meetings per year. We feel that this would give us more time to prepare more interesting and informative meetings. Also, we have already received several good suggestions for changes in the meeting format. Some of these ideas include:

- Secure speakers to give talks/demonstrations related to astronomy
- Have field trips to nearby locations and facilities that are astronomy related
- Possibility of alternating meeting locations between Auburn and Montgomery
- Try to secure a new dark-sky observing site for the club with easy access

These are just a few initial ideas. We want your ideas and feedback! We're thinking "out of the box" here so don't be afraid to suggest anything that you think might make the meetings more enjoyable and the club activities more interesting. Please send your thoughts and ideas to me at the e-mail at the top of this newsletter. If we start the meetings on a quarterly basis, that will likely be after the first of the year. The specific dates of those meetings have not been determined yet, and of course in the fall we will still need to be aware of the schedule of Auburn home football games. We would like to collect as many suggestions and ideas as possible before the December 3rd meeting so that they can be discussed at that meeting. I also welcome any suggestions and ideas you may have concerning what you would like to see in the newsletter. If you have any articles or photos that you feel would be of interest to the members, please send them to me and I'll be sure to include them in a future issue.

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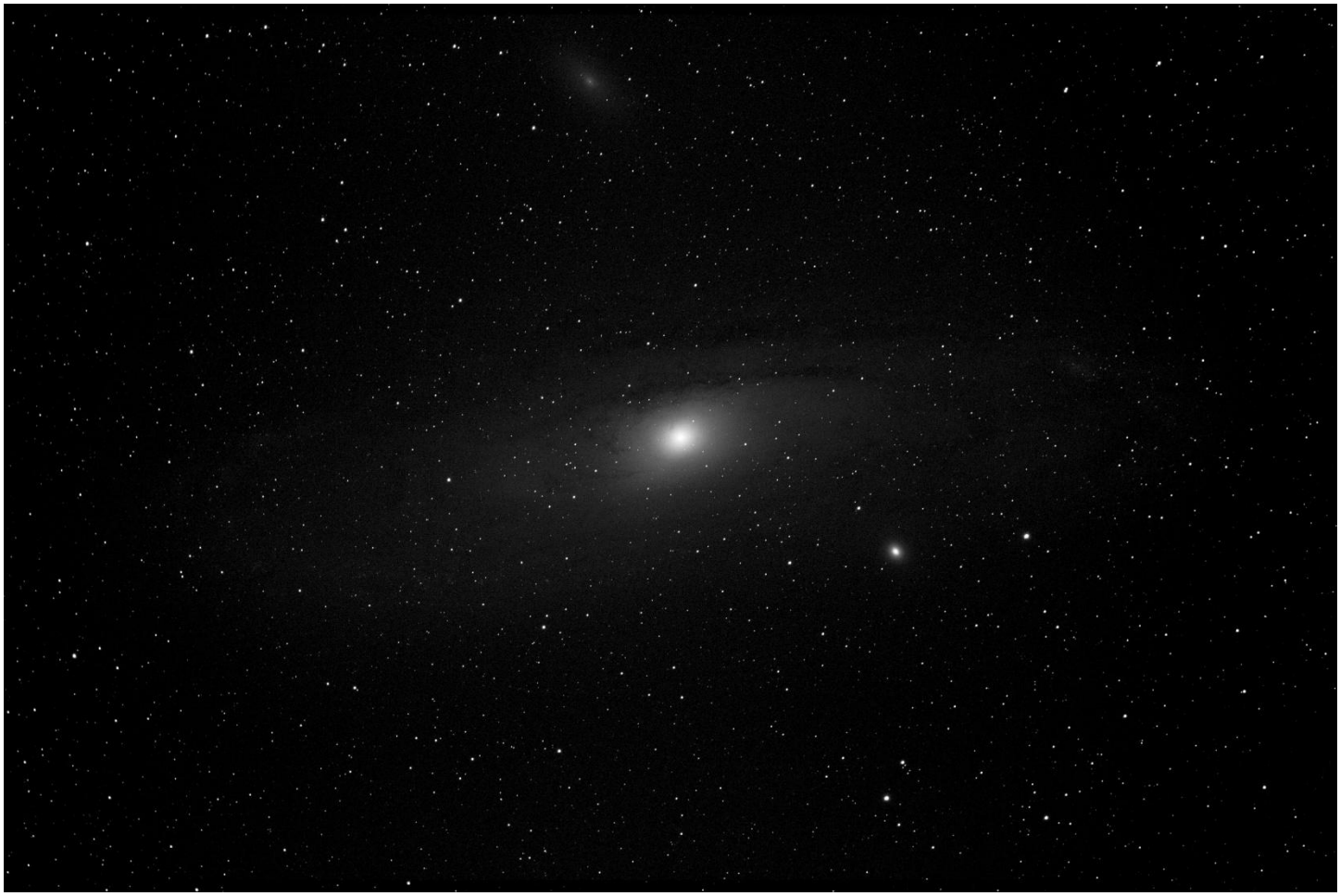
Yours truly recently brought out his scope and camera after an extended period of inactivity. Historically, I have always been somewhat lax in doing much observing during the warmer-hotter parts of the year due to not only the heat and humidity but also due to mosquitoes and the fact that it gets dark much later in the evening. However, now that the skies are getting darker earlier and the nights are cooler and the atmosphere is generally clearer, I'm more inclined to get the equipment out. I decided to concentrate on two objects that are currently well-placed for evening viewing and/or photography: the Double Cluster in the constellation of Perseus and the Andromeda Galaxy (M31). Both of these objects are fairly close together in the northeast sky in the early evening. I used my William Optics GT-102 refractor on an iOptron CEM25 mount. Camera was a Canon 600D (T3i) with a William Optics focal reducer/field flattener. Due to the fairly heavy light pollution at my home location, I also used an Astronomik CLS filter in the camera body. Exposures were still necessarily rather short, so a lot of detail in M31 was just not captured well. In both cases, 30 exposures of 25-seconds each were recorded. All exposures were controlled by BackyardEOS software on my laptop. These images were then stacked in Deep Sky Stacker with additional processing in Adobe Lightroom. All in all, it felt good to finally be back out under the stars after a rather long absence!

Andromeda Galaxy (M31) 2.5 million light-years away



Double Cluster in Perseus (NGC 869 and NGC 884) 7,500 light-years away

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Asteroid Named for AU Professor

The article below is from the Auburn University Office of Communications and Marketing and author Chris Anthony – The Samuel Ginn College of Engineering – Auburn University

An Auburn University faculty member has joined an elite group of scientists and engineers whose contributions to planetary science have warranted an asteroid naming.

Masatoshi Hirabayashi, assistant professor of aerospace engineering, was honored with the asteroid naming at the "Asteroids, Comets, Meteors 2017" conference in Montevideo, Uruguay, earlier this year. Hirabayashi's asteroid, 11471 Toshihirabayashi, was discovered on March 6, 1981 at the Siding Spring observatory in Australia by astronomer Schelte Bus.

After the discovery of an asteroid, it is given a temporary name and then a catalogue number when its orbit is more accurately determined. The International Astronomical Union's committee on small body nomenclature is in charge of selecting asteroid names based on contributions to planetary science.

"Having an asteroid name is a rare and tremendous honor for scientists and engineers," Hirabayashi said. "I am humbled that the committee placed such great value on my work, and I aim to continue producing influential research results in this area."

Hirabayashi’s work focuses on astronautics and geophysical modeling for small planetary bodies and planetary surface processes, specifically the dynamics and structure of these small bodies. He believes his study on the comet 67P/Churyumov–Gerasimenko, which was published in Nature, was a large factor in the selection of his asteroid name.

Hirabayashi plans to travel to Israel in February 2018 to observe his asteroid with a colleague who is an astronomer.

Hirabayashi’s Space Technology Application Research, or STAR, lab is collaborating with NASA and the Japan Aerospace Exploration Agency on missions that involve asteroids and other small bodies, such as the DART mission and the Hayabusa 2 mission.

"In space missions, a better understanding of natural phenomena in space will help us develop innovative technologies and solve challenging problems,” Hirabayashi said. "I would like to conduct interdisciplinary research for critical space missions, such as asteroid mining and deflection.”

Hirabayashi joined the Auburn Engineering faculty in August after spending two years as a postdoctoral associate at Purdue University. He earned his doctorate in aerospace engineering sciences from the University of Colorado Boulder.

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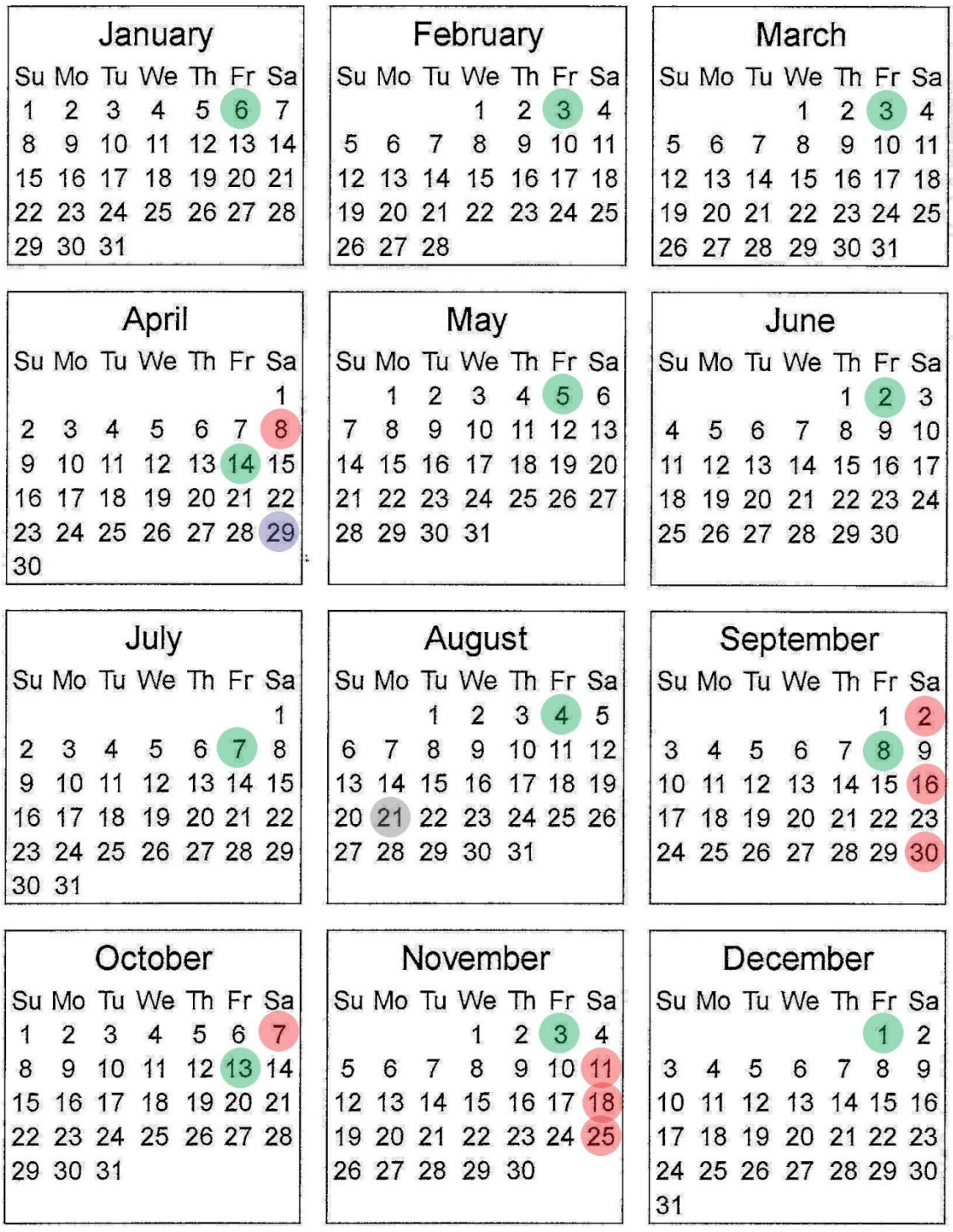
2017



AU Home Football Games (includes "A Day" on April 8)

Proposed AAS Meeting Nights

Astronomy Day (April 29, 2017)

Total Solar Eclipse (August 21, 2017)

Auburn Astronomical Society

Membership Application Form

Name: _____

Address: _____

City: _____ **State:** _____ **Zip:** _____

Phone: _____ **Date of Application*** _____/_____/_____

E-mail: _____

Telescope(s): _____

_____

Area(s) of special interest: _____

_____

Enclose: $20.00 for regular membership, effective January 1*. *Full-Time* student membership is half the Regular rate.

*** If you are a *new* member joining after January, refer to the prorated dues table below:**

Jan $20.00	Feb $18.33	Mar $16.66	Apr $14.99	May $13.33	Jun $11.66
Jul $10.00	Aug $8.33	Sep $6.66	Oct $4.99	Nov $2.33	Dec $1.66

Make checks payable to: Auburn Astronomical Society and return this application to:

Auburn Astronomical Society
c/o John Wingard, Secretary/Treasurer
#5 Wexton Court
Columbus, GA 31907

For questions about your dues or membership status contact: jwin1048@gmail.com