



North Central Florida's
Amateur Astronomy Club
29°39' North, 82°21' West

September / October 2008

Issue 73.1/74.1



Member
Astronomical
League



Member
International
Dark-Sky Association

Mike Roess Gold Head Branch State Park Star Party & Potluck Picnic.

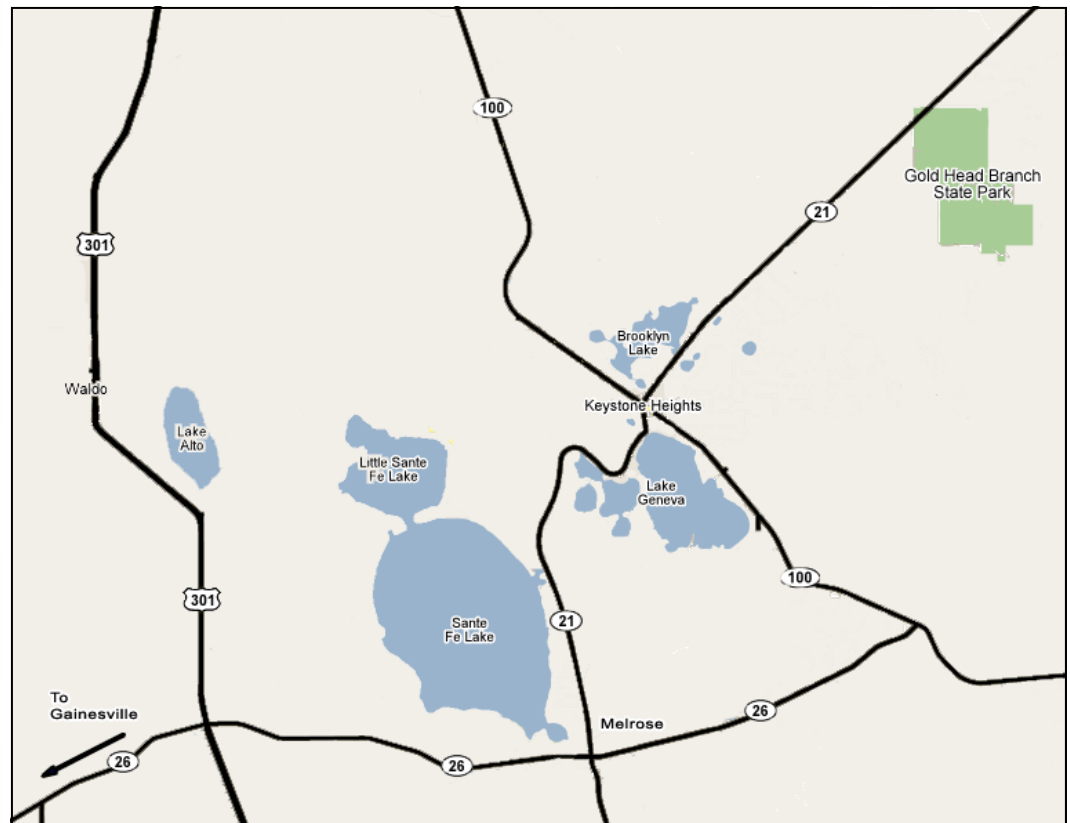
Friday, October 24 & Saturday, October 25, 2008

Join us at our third Gold Head Branch State Park star party and potluck picnic. The park is an easy, one-hour drive northeast of Gainesville, Florida or about 1-1/2 hours drive southeast of Jacksonville. Gold Head is set upon 2,366 acres of rolling sandhills, slopes, sinkholes, lakes and marshland.

Tent and RV sites are available. The Cabins are spacious and comfortable but may already be booked this late in the season. Wildlife abounds within the park. Hiking, birding and canoeing are readily available. There's dark skies, too!

No Registration is required. There are no fees for attending the star party or picnic. There *is* an entry fee to the park. You do not need to be a member of the astronomy club to attend, but we ask that you do brush up on your Star Party Etiquette before arriving.

See the website for more details and reservation information
(<http://floridastars.org/goldhead.2008.html>)



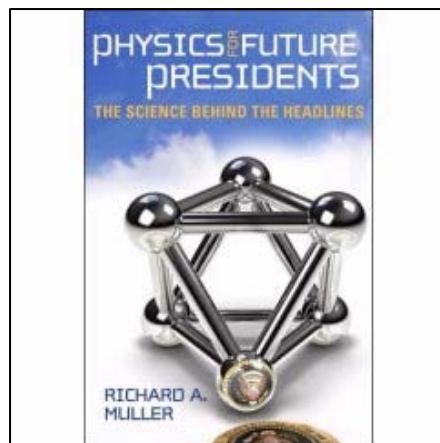
FirstLight

Newsletter of the Alachua Astronomy Club



Last month I promised I would tell you what really happened at Roswell, NM. In the meantime, Professor Richard Muller's new book, ***Physics for Future Presidents***, has come out in the non-textbook version. I wrote the very first review for it on Amazon.com. That review is reproduced below. Why am I sharing it with you? Simply this. I believe that energy security is one of the most crucial issues facing the United States for the foreseeable future. We have some important choices facing us, and I believe we all must educate ourselves in what is actually technically feasible, what are the costs of the various options, and what are the cost/benefit tradeoffs. This book is a good beginning.

Buy this book! Read it, and understand it. Then buy one for your Senators and Congressman, and insist they read and understand it. Richard Muller, a physics professor at Cal Berkeley and researcher at Lawrence Berkeley Labs, has written a highly accessible book that treats some of the most important, yet misunderstood, topics of our time. He treats, in understandable language, the physics and some of the economics of terrorism, energy, nukes, space, and global warming. You will get no politics. In fact, you probably will have no idea who he might vote for. But you will learn the key facts, questions, and alternatives on the vital issues. You will be amazed at what you didn't know, what you knew that actually isn't true, and what the real alternatives for solutions likely are. You will be outraged at the ignorance of our politicians, policy-makers, television news anchors and commentators, as well as newspaper editors and columnists. But you will not be bored.



One of the Most Important Books of the Twenty First Century, July 22, 2008; Five Stars
(21 of 21 people have found this review helpful)

Professor Muller reveals the real story, the promise and the limitations of solutions to topics such as these: Nine-Eleven, terrorist nukes, the next terrorist attack, and biological terrorism; key energy surprises, solar power, and the end of oil; radioactivity; nuclear weapons, nuclear power, nuclear waste, and controlled fusion; space and satellites, humans in space, and spy satellites; history of climate change, the greenhouse effect, evidence and false evidence, non-solutions, real solutions, and new technologies.

My personal biases: I have a background in both physics and management, and practiced both during a 35-year career with NASA. I do not know Professor Muller, but have admired his work since I discovered his "Physics for Future Presidents" podcasts on iTunesU. I highly recommend this book.

Next month, my subject actually will be "What Really Happened at Roswell, NM." There really were "flying disks" found, and there was a government cover-up. But it's probably not what you think!

Till then, Clear Skies!

Bill Helms
Alachua Astronomy Club
President@FloridaStars.org

AAC Meeting Location

AAC regular meetings are held on the second Tuesday of each month at 7:00 p.m. at the Florida Museum of Natural History, **Powell Hall**, in the Lucille T. Maloney Classroom, on UF campus, unless otherwise announced. All meetings are free and open to the public. Join us for some great discussions and stargazing afterwards. Please visit our website for more information (floridastars.org). There will be no monthly meeting in December.

Alachua Astronomy Club, Inc.

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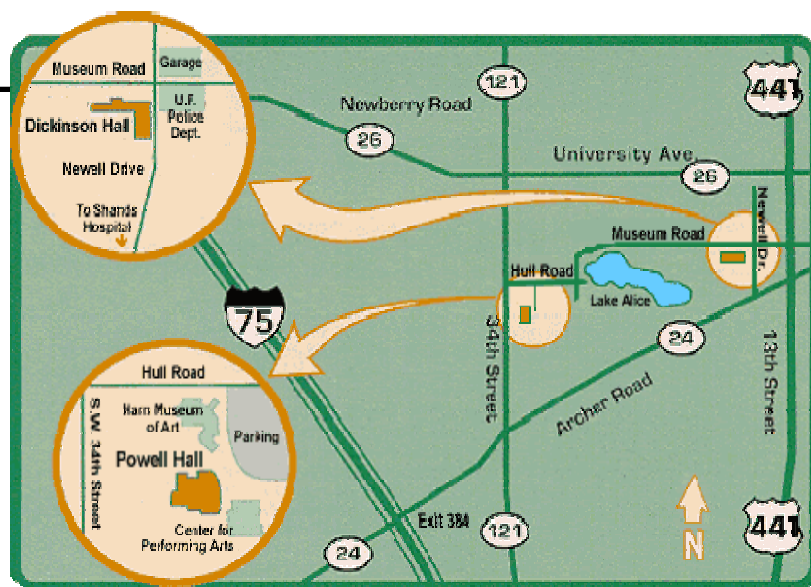
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Submitting Articles to FirstLight

The AAC encourages readers to submit articles and letters for inclusion in *FirstLight*. The AAC reserves the right review and edit all articles and letters before publication. Send all materials directly to the *FirstLight* Editor.

Materials must reach the *FirstLight* Editor at least 30 days prior to the publication date.

Submission of articles are accepted **by e-mail or on a CD**. Submit as either a plain text or Microsoft Word file. (In addition, you can also send a copy as a pdf file but you also need to send your text or Word file too.) Send pictures, figures or diagrams as separate gif or jpg file.

Mailing Address for Hard Copies or CDs

Note: Since our mailbox is *not* checked daily, mail materials well before the deadline date. (Hence, submission by e-mail is much preferred!)

c/o FirstLight Editor
The Alachua Astronomy Club, Inc.
P.O. Box 13744
Gainesville, FL 32604-1744 USA

By E-Mail; Send e-mail with your attached files to
FirstLight@floridastars.org.

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September Club Meeting

Tuesday, September 9 2008, 7:00 p.m. EDT

Speaker: Dr. Ata Sarajedini, Associate Professor of Astronomy, Department of Astronomy, University of Florida

Title: *Globular Clusters Seen in a Whole New Light*

Location: Powell Hall, Florida Museum of Natural History
Lucille T. Maloney Classroom,
UF Campus, Gainesville, Florida

Preview: Star clusters are distinct points in space and time that allow us to unravel the formation history of galaxies. I will begin by discussing the tools and techniques we use to study globular star clusters and their application to galaxies. Using these methods, we have come to some startling realizations, not about the galaxies that host these star clusters, but about the clusters themselves. I will present the latest results on this topic with an eye on the historical development of our knowledge base.

About the Speaker: Dr. Sarajedini received his Ph.D. in Astronomy from Yale in 1992, and did post-doctoral research at the National Optical Astronomy Observatory as well as at the University of California in Santa Cruz. He was on the faculty of Wesleyan University until joining the astronomy faculty at the University of Florida in 2001 along with his wife, Dr. Vicki L. Sarajedini, who is also an Assistant Professor in the Department of Astronomy.

Dr. Sarajedini research interests include stellar populations, galactic structure, distance scales, precision photometry, WIYN Open Cluster Study, and HST Globular Cluster Treasury.

Professor Sarajedini captivated his audience in March 2004 with his stunning talk on the (*The Eating Habits of the Milky Way and Andromeda Galaxies*). Like Dr. Hamman, who will speak next month, his presentation should again thrill the audience with his current presentation



Dr. Ata Sarajedini,
Assoc. Professor of Astronomy,
University of Florida

At Right:

Fred Heinrich and the ATM Group after troubleshooting the drive system of his 10" dob telescope.

Obviously, Fred went home a happy man.



ATM Ramblings.....Fall is Coming!.....

Chuck Broward

Chicken wings, snacks, and telescopes. These are the things that the ATM-Observer Group enjoy when gathering for the monthly meetings every third Tuesday of the month.

Our group is not huge, but we have, over the past year, covered a variety of subjects, and have even left with some completed projects!

Fall's lineup includes a LOG (Lunar Observing Group) meeting at Rich Russin's home in west Gainesville. This meeting will feature looking at specific lunar objects directed by Bob O'Connell, the LOG director. Members will present short programs on four specific lunar features, and we will use a variety of scopes to observe these features. This particular meeting is WEDNESDAY, September 10th. Details can be found on the Star Party page of the AAC website, [Floridastars.org](http://floridastars.org).

August's meeting featured Fred Heinrich's 10 inch dob telescope, that is driven with a stepper motor system called the Dob Driver. Fred brought the scope to the meeting to help troubleshoot the drive system. We all learned a bit about how a rather unique drive system can work with almost any telescope design. Fred left the meeting with a idea of what needed to be done to make the 'scope function properly. That evening Sandon Flowers and I spent a bit of time at the telescope checking out and comparing a box full of new eyepieces he had acquired. Hopefully he can share some of what we learned at up-coming star parties.

Part of ATM'ing is learning how to assess the performance of the optics we build, purchase, or cobble together. While there are tests one can do to mirrors and lens (and the ATM group has taken a look at these tests), a lot can be done under the stars.

One can perform star tests, gauging what they see using Suiter's book, or a program called "Aberrator" (<http://aberrator.astronomy.net/>). One also can perform observational tests--trying to assess and compare the contrast of a image, the coloration, how sharply stars stay focused across a field of view, or in my case, how astigmatic is the image. Recently I have been playing with a number of scopes, and have learned that a big part of optical instrument selection is really shaped by your local seeing! I have learned that at my location in Gainesville, near the shore of Hogtown Creek, it does not really matter how big my scope is, I am limited by the atmosphere above my head, and the lights of campus and 13th Avenue. What it boils down to is that for in-town viewing, a small easy-to-handle 'scope is awfully useful most of the time! A big scope is not!

But, I will continue to keep my big scopes for star parties away from muzzy Gainesville.

A final note....the club has a 18 inch telescope. It is big, it is heavy, and it has been little used. We built it, and some of us have a special attachment to it. I would like your input on how best to use a larger scope. It is a delight to look at a galaxy and see spiral arms, to look at the Lunar surface and be mesmerized by the huge amount of detail that can be seen, but instead, the RLT (Rather Large Telescope) languishes in the club's storeroom. A good ATM project might be to fix it up, put a drive system on it, and use it. If you would like to provide input on this, please let me know !

In the meantime, clear sky!

Chuck Broward, ATM Coordinator, and AICor, and owner of two CATS (SCT scopes), two refractors, a 10 inch Dob, a 6 inch reflector, and boxes of spare parts. Chuck has been involved in the AAC since the beginning.

After some deliberation, the club is imposing a new policy regarding the use of green lasers at AAC activities, the details of which are below. All users of green lasers should become familiar with these rules. The alternative is to ban them outright.

Summer weather continues to be vexing. We canceled our planned star party at the Jacob's residence in early August, were clouded out for the Perseids the following week and are now waiting out Tropical Storm Fay as I write. Not to despair, autumn typically brings better skies.

Our next star party will be on Saturday, September 27 at Stargate Observatory (the Heinrich's residence), near Live Oak. You are welcome to bring along a potluck dish but it is not required.

October features a 2-night star party at Gold Head Branch State Park beginning on Friday, October 24. We will set up telescopes at the Boat Ramp on Friday, and then the Recreation Field near the Picnic Area on Saturday. This year, there will be no pre-registration but we will still plan to have a potluck dinner on Saturday afternoon. My understanding is that the cabins are booked but there are still quite a few primitive sites left. If you plan to arrive after 5pm on either day, or if you plan to depart during the evening, you must contact the ranger ahead of time for entry and exit instructions.

Mike Toomey has served the AAC in many capacities since 1998, including President, Secretary, FirstLight editor and Star Party Coordinator. He won the AAC's Service Award in 2000. Mike resides in Gainesville with his wife Heidi.

Use of Laser Devices at AAC Activities

Operators of green laser devices assume full responsibility for their use and potential mishandling at all Alachua Astronomy Club, Inc. activities. For the safety of club members and the public, the following rules are in effect at all AAC activities:

Operators of green laser devices must be at least 18 years of age.

You are solely responsible for the security of your laser device. Do not allow others to use your laser.

Be certain that the activity you are attending permits the use of lasers.

Never point your laser horizontally (i.e. at eye level)!!! Aim laser light at least 20 degrees above the horizon.

Do not aim laser light at any person or animal.

Do not aim laser light at or through optical devices including telescopes and binoculars.

Do not aim laser light directly at any moving object. Always consider the possibility of a mistaken identity (i.e. aircraft instead of artificial satellite).

Aiming of lasers on terrestrial objects should be done thoughtfully:

Not against cars, trailers and other highly reflective objects

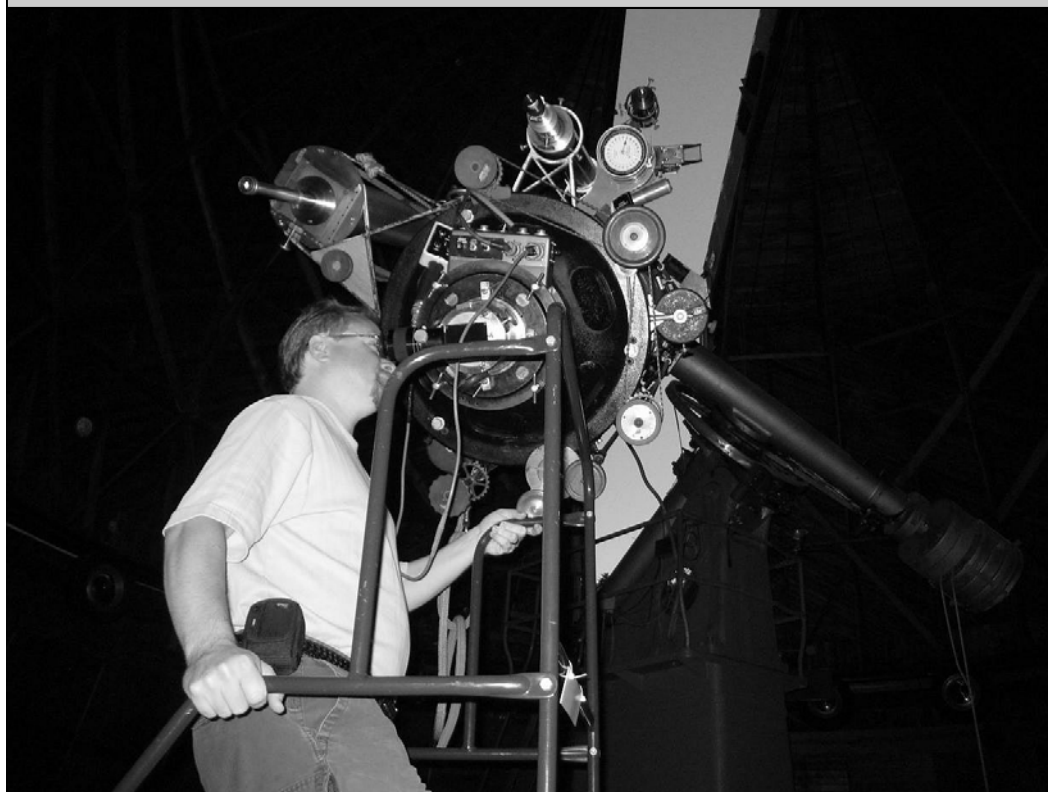
Not against distant and/or unknown objects, such as tree lines and buildings

Class III-B lasers (those in excess of 5 mW) are restricted by federal law.



Above: The AAC sets up solar viewing at the Tower Road Party. Far left in the photo is the club's new Coronado PST (Personal Solar Telescope).

Below: Mike Toomey looking through the 24" Clark refractor at Lowell Observatory, Flagstaff, Arizona.



PROPOSED
BYLAWS OF THE ALACHUA ASTRONOMY CLUB, INC.

City of Gainesville, County of Alachua, Florida
Founded 1987 September
Incorporated 1999 January 15

Bylaw Revision Dates: 1988 September 8
 1995 September 12 (major revision)
 1995 November 14 (minor correction)
 1999 January 12 (incorporation as AAC, Inc.)
 2001 October 9 (major revision)
 2005 September 13 (reduced additional board members)
 2007 March 13 (filling vacant board positions)
 2008 September 9 (major revision)

Name and Purpose

We constitute ourselves as the Alachua Astronomy Club, Inc., wishing to secure the fellowship, pleasures, and benefits of an association with persons commonly interested in astronomy. We hereby enact these Bylaws to help govern our club. The specific purpose for which this corporation is organized is to promote the science of astronomy by:

- Providing opportunities for the local community to learn about and become interested in astronomy, such as, but not limited to, astronomy lectures, demonstrations, and sky observing events;
- Making astronomy in general more accessible and visible to the general public, through public and media outreach; and
- Providing opportunities for its general membership to learn and improve skills related to amateur astronomy, such as, but not limited to, sky observing, amateur scientific research, and the selection, construction, and use of astronomical equipment.

Membership

Membership in this club will be open to anyone with an interest in astronomy. A "member in good standing" is one who is up to date in the payment of his or her dues. The "general membership" will consist of all members in good standing.

Dues shall be established by a vote of the Board of Directors becoming effective January 1.

Meetings

"Meetings" shall mean regularly scheduled club meetings each month at a date and location designated by the Board of Directors. Where not indicated to the contrary, Roberts Rules of Order shall be followed in the conduct of the meetings.

Business

A "quorum" shall consist of at least 15% of the members in good standing (including one officer). A vote taken during a meeting will be binding on the club only if a majority of members present approves the motion.

Management of the Club

The affairs and business of the club shall be conducted and managed by a Board of Directors. The Board will include the following elected officers: President, Vice President, Secretary, and Treasurer, all of whom will be elected annually by the general membership. All elected officers and directors shall be members in good standing for the year in which they will hold office. Each officer is responsible for the accomplishment of the duties defined herein.

Additional Board members may be elected annually by the general membership.

Vacancies in the Board of Directors shall be filled by a vote of the majority of the remaining members of the Board of Directors for the balance of the year.

The Board shall approve expenditures for club business up to FIVE hundred dollars (\$500). Any expenditure greater than \$500 shall be approved by the general membership.

President

The President shall preside at all club meetings and shall see that all club business is conducted in a manner that is consistent with these bylaws. Whenever necessary, the President shall create committees and appoint chairpersons who will thereupon recruit committee members to assist them in adequately conducting club activities. All chairpersons are responsible to the President.

Vice President

The Vice President shall assume all duties of the President in the President's absence. Additional responsibilities for the Vice President will include Parliamentary duties, to interpret and arbitrate parliamentary procedures per Roberts Rules of Order.

Secretary

The Secretary shall be responsible for all correspondence, the accurate recording of all motions and official actions taken at all meetings, and for maintaining club property records and important documents.

Treasurer

The Treasurer shall be responsible for the collection and disbursement of all club moneys authorized by the general membership or the Board of Directors. The Treasurer shall keep up-to-date and accurate, complete, and comprehensive records, including a membership records.

Elections

Elections shall be held once a year at the November meeting. The President shall appoint a nomination committee consisting of two members from the Board of Directors and one from the general membership no later than September. A slate of officers and directors will be presented at the October meeting. Additional nominations will be accepted from the floor at that time, and also at the November meeting immediately prior to election. Terms of office shall be for one year, with the restriction of three consecutive years limitation for re-elections to each individual office.

Amendments

These Bylaws may be amended or changed at any meeting where a quorum is present, on a motion by a member in good standing, which is seconded, and then passed by a 2/3 majority of all members present.

Dissolution

Upon the dissolution of this organization, assets shall be distributed for one or more exempt purposes within the meaning of section 501(c)(3) of the Internal Revenue Code, or corresponding section of any future federal tax code, or shall be distributed to the federal government, or to a state or local government, for a public purpose.

[End of AAC Bylaws]

The AAC will be asked to vote on the Bylaw revisions in the September Club Meeting. Please review the changes and come prepared to discuss them during the business meeting portion of the September 9th meeting (7:00pm).

Note: The following article (in modified form) was submitted to *The Gainesville Sun* this past March to alert people about National Dark-Sky Week 2008. *The Gainesville Sun*, however, apparently decided this event was not important for its readers and did not publish the article.

Where Have All the Stars Gone?

— Howard L. Cohen

This year's National Dark-Sky Week Celebration went unnoticed by most people, a sad commentary on a nation where the stars themselves now go mostly unnoticed

A person once asked why do we live in such an uninteresting part of our Galaxy? The answer is that we don't—just turn out the lights! Most Americans have never seen or can no longer see the majestic, ghostly Milky Way band that crosses the sky. Some people believe that remote areas of North Florida are dark. Many others mention seeing dark nights during vacation trips falsely believing they have seen truly “dark skies.” In fact, most such skies may appear dark compared to home locations but few areas in the United States are actually free of unpolluted dark skies.

Unfortunately most people are unaware or uneducated about the growing menace of unwanted and unnecessary night lighting. Known as “light pollution,” this incessant problem now impacts not only star gazers but also affects our everyday lives and our environment.

The observance of the sixth annual National Dark-Sky Week took place March 29 through April 4, 2008. This event, endorsed by the International Dark-Sky Association (IDA), American Astronomical Society (AAS), and the Astronomical League (AL), hopes to enlighten the public about the “glow” from outdoor lights that wash out the stars in the night sky. This event usually occurs near the time of New Moon in April and encourages people in the United States to turn out their unnecessary outdoor lights to reduce light pollution.

Unfortunately, National Dark-Sky Week 2008 went unnoticed by most citizens. Certainly the news media said little or nothing about it. Still, concepts about light pollution promoted by this celebration should not be reserved to just one week but to the entire year.

The National Dark-Sky web site notes that “Light pollution is a hazy blanket of light in the atmosphere caused by improper lighting fixtures that direct light up into the sky instead of down toward the ground.” Light pollution produces both sky glow, light trespass and glare. This puts unwanted light into neighboring properties, interferes with astronomical observation, reduces visibility, and creates undesirable environmental and human problems.

The adverse effects of light pollution—light trespass, glare, energy waste, decreased visibility at night, sky glow, light clutter or poor aesthetics and false security—produce harmful impacts on humans, wildlife and ecosystems. Expanding cities and new developments also expand light pollution and ultimately take their toll in many insidious ways. For example, studies suggest poor lighting can affect birds, insects and plants disrupting their natural growing cycles. Light pollution appears to injure the habits of marine animals including our majestic sea turtles and the elusive beach mouse. According to the IDA, a group dedicated to promoting responsible outdoor lighting, improper and over-lighting can negatively impact bird migratory patterns and confuse species that mate in darkness. Artificial light may even affect people whose physiology requires some level of dark hours. Finally, bad lighting costs more, wastes light and thus energy, which may contribute to global warming.

Examples of bad lighting are all around us. For instance, garish ornamental pole lights and many unshielded, neighborhood streetlights are “glaring examples.” These luminaries are light and energy

inefficient, producing glare with nearly half the light going into the night sky. Such harsh lights hinder visibility, interfere with our ability to view areas, roads or objects, and can be a problem for aging eyes. Improper lighting fixtures reduce night vision, impair driver eyesight and make oncoming cars and pedestrians less visible.

Educational institutions should set examples for good lighting but often do not. Visit the University of Florida campus for numerous examples of bad lighting. Many campus streetlights, including lights recently placed around UF's new Pugh Hall, are unshielded, dazzling bright lamps. In contrast, the City of Gainesville has done a good job in recent years erecting shielded, energy efficient street lighting. Drive on Archer Road west of Interstate 75 at night and notice how streetlights illuminate the road without glare lights shining in your eyes or reducing visibility.

Public unawareness of light pollution has also led to misuse of lights by many homeowners, businesses and developers who are unaware of improper lighting and their negative impact. Brilliant outdoor flood and building lights illuminate and trespass onto neighboring streets and homes. These "glare bombs" spread misdirected horizontal beams that spoil vision and cause discomfort as they spill onto adjacent properties and into interior rooms infringing on nighttime privacy. Some may advocate the need for brilliant, dusk-to-dawn security lighting at homes and businesses. This is a common myth. Such over and misdirected lighting produces glare and harsh shadows making it more difficult to see. Poorly designed and placed lights often create harsh, deep shadows that make for good hiding places. Good lighting is not necessarily no lighting but lighting directed downward so they do not intrude into secluded zones or residential areas. Besides, most crimes probably occur during daylight hours!

Light pollution is a by-product of lighting at night, especially when we use inefficient luminaries and lamps, and when we light to excessive levels. We can reduce our impact on light pollution by lighting more efficiently. Choose efficient luminaries and shielded lamps so they require fewer lamps. Reduce or turn off unnecessary outdoor flood and house lighting. Use timers or preferably motion sensors, reduced wattage and high efficiency lamps, subdued solar lights, and employ ornamental fixtures with proper shielding and glare control.

To participate in the idea of National Dark-Sky Week, turn out unnecessary outdoor lights. Encourage friends and neighbors to do the same. (Benefits will be marginal if you turn out your outside lights while a neighbor's lights blind you.) Consider keeping outdoor lighting minimal and efficient throughout the year. Purchase dark-sky, friendly lighting. Finally, attend and participate in school, public and astronomy club star parties. (See the AAC web site for a list of club star parties at floridastars.org.)

Finally, preserving dark skies is important not just because light pollution is an environmental and economic issue. Starlit skies have historically influenced the human spirit since earliest times. Starry skies also nourish a child's curious and questioning mind. If our dark skies disappear like the dinosaurs, we are destined to grow future generations of children who will grow up having never seen the beauty, encouragement and mystery of the stars.

For more information on the International Dark Sky Association and Dark Sky Week, visit www.darksky.org and www.ndsw.org, respectively.

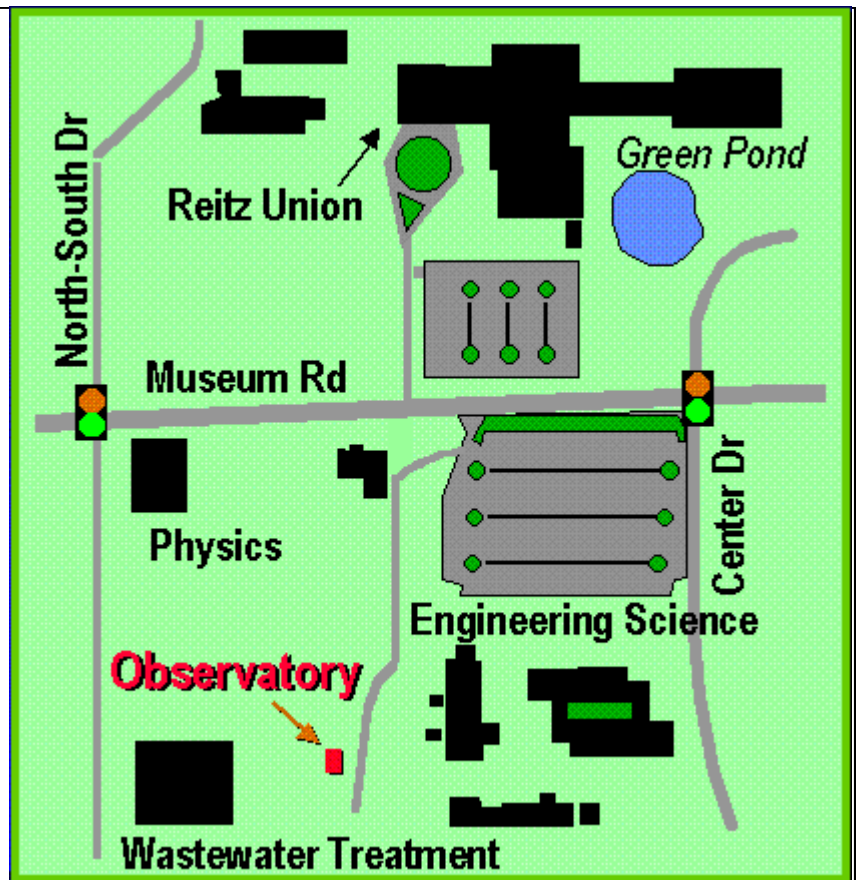


Howard L. Cohen is an emeritus professor in the University of Florida's Department of Astronomy and a founding member of the Alachua Astronomy Club, Inc.

A Teaching and Public Observatory

The Department of Astronomy at the University of Florida operates an on-campus Teaching Observatory for educational and public programs. These events are all free to the public.

The observatory is open Friday evenings, from 8:30pm to 10:00pm, whenever UF classes are in session. The observatory is located south of the Reitz Union parking lot and west of the Aerospace Engineering building, off Museum Road. Below is a schedule of the upcoming viewing possibilities:



September 2008 Date	Objects	Special Groups
Sept. 5	- Jupiter - Ring nebula M57, globular clusters M13, M3, M5 - Double stars Mizar and Albireo (The "Gator" star)	None
Sept. 12	- Jupiter - Moon - Ring nebula M57, globular clusters M13, M3, M5 - Double star Albireo (The "Gator" star)	Boy Scout Group Troop 432
Sept. 19	- Jupiter, (Neptune - Late) - Ring nebula M57, globular clusters M13, M3, M5 - Double star Albireo (The "Gator" star)	None
Sept. 26	- Jupiter, Neptune, Uranus - Ring nebula M57, globular clusters M13, M3, M5 - Double star Albireo (The "Gator" star)	None
Oct. 5	- Jupiter	None
Oct. 12	- Jupiter	None
Oct 19	- Uranus	None
Oct 26	- Uranus	None

October Club Meeting

Tuesday, October 14 2008, 7:00 p.m. EDT

Speaker: Dr. Fred Hamann, Professor of Astronomy,
Department of Astronomy, University of Florida

Title: *Which Came First, the Chicken and/or the Egg?*
--- *Super-massive Black Holes and the Birth of Galaxies*

Location: Powell Hall, Florida Museum of Natural History
Lucille T. Maloney Classroom,
UF Campus, Gainesville, Florida

Preview: One major milestone in astronomical research was the recent discovery that super-massive black holes reside in the centers of galaxies, including our own Milky Way. These holes in the cosmic space-time devour any matter that haplessly ventures too close. They can accumulate masses equal to a billion Suns, but they are still tiny compared to the sizes and masses of the galaxies themselves. One might expect the black holes to have almost no effect on their galaxy-scale surroundings, but the reality is probably just the opposite. These little pinholes in space-time might actually regulate galaxy formation at critical evolutionary stages billions of years ago. I will provide an overview of this fascinating research field, including some recent results from my own group here at the University of Florida.

About the Speaker: Dr. Hamann received his Ph.D. at the State University of New York at Stony Brook (SUNY) in 1987, and subsequently worked as a research fellow at the Carnegie Observatories, the Ohio State University, and the University of California at San Diego, before joining the faculty at UF in 1999. Main interests are studies of quasars, active galaxies, galaxy evolution, early-epoch star formation, elemental abundance evolution, circumstellar environments of pre- and post-main sequence stars, nebular astrophysics.

Professor Hamann is becoming a tradition at AAC meetings. He has unselfishly spoken to the AAC numerous times in past years including May 2004 (*Twinkle, Twinkle, Huge Explosion: The Story of Gamma-Ray Bursts*), February 2005 (*From Darkness Into Light: The End of the Dark Ages*), and July 2006 (*Life on the Edge: The Story of Eta Carinae*). His wonderful talks are always interesting, informative and enthusiastically received. And they are easily understandable by even novice star gazers.

(Note: This talk was originally scheduled for August 2008.)



Dr. Fred Hamann,
Professor of Astronomy,

The meeting was called to order at 6:41 PM

TC Board members present

Bill Helms (BH), David Liles (DL), Larry Friedberg (LF), Tandy Carter (TC), Howard Cohen (HC), Pamela Mydock (PM), Bob O'Connell (BO'C); TC Chair persons present: Michael Toomey (MT), Tim Malles (TM)

TC Club members attending: Thomas Olmsted, Rich Russin

Minutes were read and approved as presented: BO'C moved and LF seconded to accept the minutes

Officer, board and standing committee reports

a. LF distributed the Treasurer's report

Savings Acct		Checking Acct	
5/1/2008 through 5/31/2008		5/1/2008 through 5/31/2008	
BALANCE	\$5,086.	BALANCE	\$1,380.
4/30/2008	36	4/30/2008	67
BALANCE	\$5,088.	BALANCE	\$1,367.
5/31/2008	52	5/31/2008	63
TOTAL INFLOWS	\$2.16	TOTAL INFLOWS	\$48.00
TOTAL OUT- FLOWS	\$0.00	TOTAL OUT- FLOWS	\$61.04
NET TOTAL	\$2.16	NET TOTAL	\$13.04

LF volunteered to maintain the membership roster, if given instruction; LF asked about the dues to the Astronomical League

LF asked about how the new members were added to the FirstLight mailing list; OPEN

TC reported on the status of club Equipment: SkyQuest XT-8 – Larry Friedberg (C) with Fred Palgon

PST – Michael Toomey (C) with Bill Helms; Collimating Tools – Michael Toomey (C) with custodian

MT reported on Star Parties: the June star party was moved to the rain date; all future star parties were as posed on the web

MT reported the possibility of changing the November star party to the new Chiefland observing site

There was a general discussion of the facilities available at the observing site

HC reported that the Gold Head Branch star party was on UF homecoming week end

TM reported that the program schedule was back on track

HC asked about the Club's purchase of a FM wireless microphone; BH volunteered to contact Don Loftus.

BH volunteered to coordinate with NASA for a speaker; TM reported on his publicity efforts

BO'C reported that the next LOG activity will be at Rich Russin's house in September; that the Moon will not be well placed for the third Tuesday the rest of the year; that the North Florida Rehabilitation Center wants an LOG activity; and

that the Lunar Reconnaissance Orbiter is scheduled to launch in October and might be a good outreach function

TC reported on Outreach / School Liaison activities: the next Outreach activity is Astronomy Day 2009 at the Santa Fe Community College; TC asked who the person was to contact about the Club trying to reinvigorate the School Liaison activity

MT said that the person to talk to is the Volunteer Coordinator; BH recommended the Science Curriculum Coordinator.

Special committee reports

PM reported on the plaque and murals at the Royal Park Stadium 16 Theater: With a recent change in management, there were no plans to remove the murals. (Added Note: HC has plaque.) CLOSED

MT reported on revisions to the dues structure. There was a general discussion; OPEN

MT, LF and TC were assigned as a committee to revise the by laws; OPEN

Old Business

BH reported that he is making no progress on posting the AAC policies to the web page

LF moved and DL seconded to close this item until BH has completed the posting. CLOSED

Report on the AAC role in the 2009 IYA: BO'C reported that he was unable to solicit a new member to head up the AAC IYA participation. BH asked if this bullet should be closed. There was general agreement to keep the bullet open

BH reported that the IYA web page is not progressing. OPEN

LF reported that the AAC is listed in IRS Publication #78 as a tax exempt charitable organization. LF reported that he had submitted the request for tax exempt status from the state of Florida and is waiting for the response. OPEN

HC reported on the Gainesville Solar Walk and that the artist is proceeding with the Comet Halley markers

HC reported that the plans for the asteroid portion of the Solar Walk the Arts in Public Places Trust (APPT) desires will cost more money that has been budgeted. The APPT is going to request grant money from the Alachua County

Visitors Development Agency. HC moved and LF seconded that the AAC in cooperation with the APPT of the City of Gainesville make grant applications to the Alachua Visitors and Convention Bureau for the purpose of acquiring tourism grant money through both their (1) Tourism Product Development Program and their (2) Tourism Product Development Capital Grant Program. The AAC will also provide letters of support and other documentation as required to support these grant applications, to (1) further enhance and market the Gainesville Solar Walk in the development of Alachua County out-of-county-tourism and (2) make capital improvements and enhancements to the existing Gainesville Solar Walk.

The motion passed by a voice vote of 6 – 0. OPEN

BH reported on Astronomy Day at Kika Silva Pla Planetarium and that Astronomy Day was a big success. CLOSED
BO'C reported on the SOG and that he is still trying to get someone to run the SOG. BO'C questioned the usage of the Club's PST. BO'C suggested several different programs for the SOG. OPEN

BH reported on the debrief meeting with the FLMNH for Starry Night and that the FLMNH was very pleased with the support that the AAC has been giving. BH reported that the FLMNH is going to recommend that it be the sole sponsor of Starry Night from next year on BH reported that Thursday April 2, 2009 will be the date of Starry Night. CLOSED
HC reported on purchasing and production of posters for AAC events. BH reported he was working on the images and text to be turned in to the FLMNH for creating the posters. There was a general discussion of mounting and lighting the posters

OPEN

TC reported on the NASA Night Skies Network membership and that after he sent an email to the board members and chair people he did not receive any response CLOSED

LF reported on printing club brochures and that he was able to print the brochures on his high speed printer but needed to procure the paper for the printing. OPEN

HC reported that he delivered the plaque to SM. CLOSED

BH reported on creating the nominating committee and that there had been no progress. OPEN

New Business

MT reported that the AAC had not been paying its dues to the International Darksky Association. BO'C moved and LF seconded that the AAC pay its annual dues in perpetuity. The motion was approved 6 – 0. CLOSED

HC requested a discussion of future distribution of FirstLight. BH suggested that HC coordinate with the Dues Structure committee for the delivery of the FirstLight. BH suggested that a hard copy of the FirstLight only goes to full paying members and senior members. OPEN

BH requested a discussion of replacing the Apogee AP-6 CCD camera with a Mallin camera. TC asked about the size of the imaging chip. TC noted that since this is a modified web-cam, it will have a very small chip and require very precise guidance

TC asked if this was a CCD imaging head or a modified web-cam. BH reported that it was a modified surveillance camera

There was a general discussion about the capabilities of the camera. DL volunteered to search astromart for the possibility of swapping the Apogee camera for a Mallin camera. BH suggested that DL proceed with the astromart search.

OPEN

HC asked if the club had received a check from the Villages for our participation in their Starry Night. LF stated No.

OPEN

TC moved and LF seconded to adjourn the meeting, the meeting was adjourned at 9:52 P M

Respectfully submitted

Tandy W Carter Jr.

AAC Secretary

SkyQuest XT-8 – Larry Friedberg (C)

Museum telescope (6" equatorial Newtonian) – Don Loftus (C)

Celestron C8 – Gary Cook (C)

4 ½" Reflector – Marianne Gamble (C)

8" Parks Dobsonian – Don Loftus (C)

RLT – Chuck Broward (C)

PST – Michael Toomey (C)

Glatter Laser collimating Tools – Michael Toomey (C)

Apogee AP-6 – David Liles (C)

AAC banner – Tandy Carter (C)

FirstLight

September / October
2008

Pipsqueak Star Unleashes Monster Flare

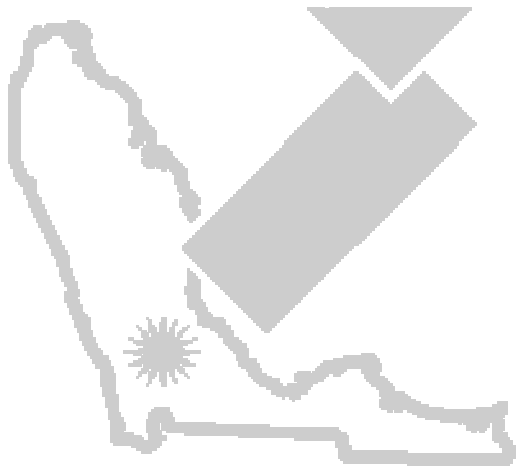
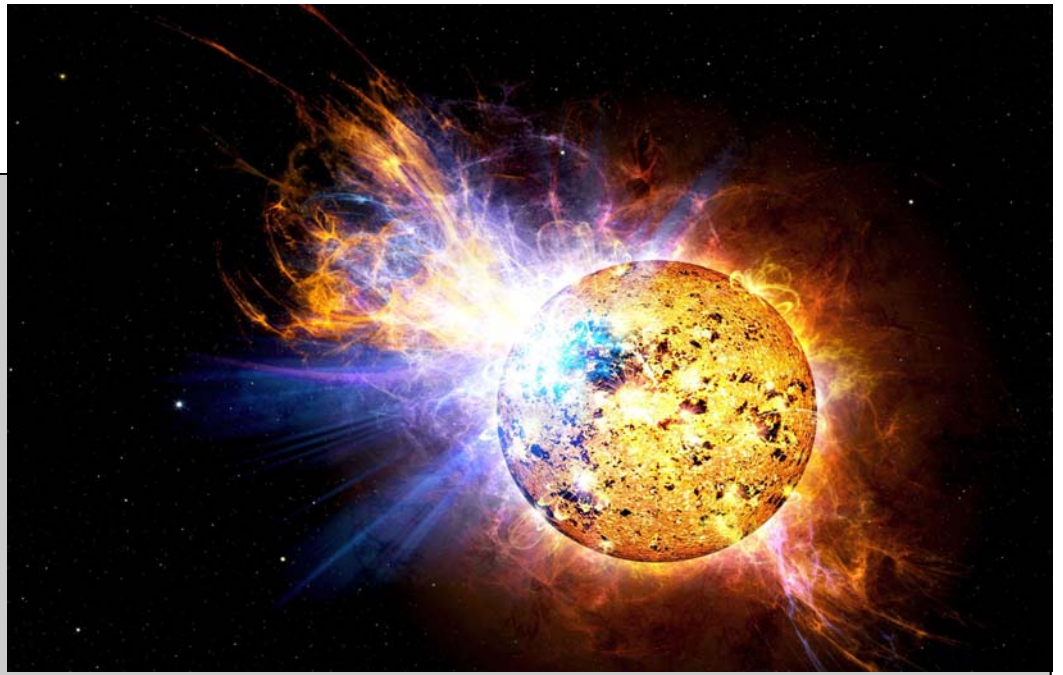
Photo Credit: Casey Reed/NASA

For many years scientists have known that our sun gives off powerful explosions, known as flares, that contain millions of times more energy than atomic bombs.

But when astronomers compare flares from the sun to flares on other stars, the sun's flares lose. On April 25, 2008, NASA's Swift satellite picked up a record-setting flare from a star known as EV Lacertae. This flare was thousands of times more powerful than the greatest observed solar flare. But because EV Lacertae is much farther from Earth than the sun, the flare did not appear as bright as a solar flare. Still, it was the brightest flare ever seen from a star other than the sun.

What makes the flare particularly interesting is the star. EV Lacertae is much smaller and dimmer than our sun. In other words, a tiny, wimpy star is capable of packing a very powerful punch.

How can such a small star produce such a powerful flare? The answer can be found in EV Lacertae's youth. Whereas our sun is a middle-aged star, EV Lacertae is a toddler. The star is much younger than our sun, and is still spinning rapidly. The fast spin, together with its churning interior, whips up gases to produce a magnetic field that is much more powerful than the sun's magnetic field.



FirstLight
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