

THE FLINT RIVER OBSERVER

Newsletter of the Flint River Astronomy Club
Vol. 11, No. 2 April, 2007

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Club mailing address: 190 West James Circle, Hampton, GA 30228. Web page: <www.flintriverastronomy.org>; discussion group at <FRAC@yahoogroups.com>.

Please notify **Bill Warren** if you have a change of home address, telephone no. or e-mail address.

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Club Calendar. Thurs., Apr. 12: FRAC meeting (7:30, 2nd floor of Stuckey Bldg. in the UGA Cooperative Extension Griffin Branch complex); **Fri.-Sat., Apr. 13-14:** Cox Field observings (at dark); **Thurs.-Sun., Apr. 19-22:** Georgia Sky View star party (Camp McIntosh, Flovilla, Ga., S of Jackson, Ga.); **Tues., Apr. 24:** UGa Cooperative Extension

class/observing, 7:00; **Sat. & Sun., Apr. 28th & 29th:** Great Griffin Mayfling (10 a.m.-6 p.m. Sat., 11 a.m.-5 p.m. Sun. at City Park in Griffin).

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President's Message. Our fourth annual **Georgia Sky View** star party is just over a week away. **Steve Knight** has been working on it for months, so now it's our turn to help out by filling in wherever Steve needs us.

We'll need a few people to meet Thursday morning, April 19th, to get chairs, tables, etc. set up in the dining hall. There are also a number of small jobs to be done, such as putting toilet paper in the restrooms, making sure we have hot water in the showers -- **Doug Maxwell** saved the day for us on this one a couple of years ago -- setting up the observing field for parking, putting up signs, etc. Then, throughout the weekend, there'll be occasional tasks such as keeping things clean, keeping munchies, coffee, etc., supplied, staffing the registration booth, maintaining security, etc.

None of these duties and responsibilities are difficult or time-consuming, they just need volunteers to take 'em on. I expect that, at the April club meeting, Steve will be asking for commitments. Please volunteer to help out if you can. I encourage everyone who is planning to attend the event but can't make the meeting to call or e-mail Steve to offer your services for a little while during the weekend.

I'm scheduled to give a public observing at the VA Hospital on Clermont Avenue on Sat. night, May 26th, from about 8 p.m. till whenever. Sunset is about 8:30. **Saturn, Venus** and the **Moon** should be visible. I'll set up on the patio at the nursing home. There are security lights in the middle of it, so the stars should be pretty dim. I'm told to expect maybe 20-25 people in attendance. I could handle it by myself if necessary, but I'd like a little help in case there is a larger crowd.

I say "I'm" rather than "we're" scheduled because I don't want anyone to feel pressured to participate. It's a long drive, located next door to Emory University where the Atlanta Astronomy Club holds its meetings. FRAC won't get any members from this

observing, so there isn't any self-interest in it. As I said at last month's meeting, it's for the troops.

Apparently, few of the patients are Iraq war veterans. They're mostly Korean War and Vietnam vets, older guys. But I and roughly half a dozen FRAC members have served in the military, so I thought I'd offer the opportunity for FRAC members to give back to these men who have given so much for this country. I could also pass the offer on to AAC, but I'll offer to you first. I had lots of offers when I mentioned it at the March meeting, so I'll provide more details at the April meeting.

Finally, I know you'll want to join me in welcoming back to FRAC **Dr. Steve & Aimee Mann**. Steve, an anesthesiologist and a former FRAC member with a renewed interest in astronomy that he shares with his charming wife, attended our March meeting with Aimee, joined the club, and they came out to Cox Field for our Saturday observing. I hope they enjoyed it and will come back for our April Cox Field observings, because everyone attending certainly enjoyed their time spent with the Manns.

-Curt Cole

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Last Month's Meeting/Activities. Seventeen members, including **Steve & Aimee Mann** of Griffin, who joined FRAC that night, attended our March meeting along with **Curt & Irene Cole, Steve & Betty Bentley, Larry Higgins, John Wallace** – and gee!, it was good seeing John again – **Joel Simmons, Jim Chiu, Steve Knight, Charles, Erica & Jeffrey Anstey, Felix Luciano, Smitty** and **yrs. truly**. Our speaker was the Atlanta Astronomy Club's legendary **Ken Poshedly**, who talked about the AAC, the Peach State Star Gaze and A.L.P.O. Said Ken: "I moved to the South from New York, but I quickly learned not to expect Georgians, who elect politicians with names like **Bubba, Newt, Wyche** and **Sonny**, to be able to pronounce my Czechoslovakian name correctly." (*It's pronounced Po SHEDD lee. -Ed.*)

Later, we elected officers for the next 12 months – **Curt Cole**, president; **Bill Warren**, vice president; **Irene Cole**, secretary/treasurer; and **Larry Higgins** and **Tom Danei**, board members. Afterwards,

everyone celebrated FRAC's tenth birthday, thanks in no small part to the wonderful birthday cakes prepared by **Lisa Anstey** (beautifully astronomy-themed) and **Betty Bentley**. Thanks, ladies. They were delicious.

Of our Fri., Mar. 16th club observing, **Curt** wrote, "**Joel (Simmons)** and I were the only ones to brave the wind and chill at Cox Field, but it really wasn't too bad (38 degrees by the time I left at 1:50 a.m.). Joel worked on the Binocular Messier Club and I worked on the Binocular Deep Sky Club; later, I started on the Herschel 400s with my telescope. We were serenaded by the coyotes." (*Are you sure it wasn't Larry H. singing, Curt? -Ed.*)

The following evening, **Smitty, Larry, Joel** and **Steve & Aimee Mann** joined **yr. editor** at Cox Field under conditions that changed from clear to overcast about every 15 min. Aimee managed to be lovely even in total darkness; it's too bad we couldn't be equally complimentary about Smitty or yrs. truly.

On Fri., Mar. 23rd, **Larry Higgins** and **yr. editor** conducted an observing for about a dozen scouts and their parents in Brooks. Two nearby security lights and a waxing crescent Moon limited what we could show them of the deep-sky, but the children were enthusiastic and surprisingly knowledgeable, Larry was typically skillful in leading them through his presentation, and the presence of **Saturn, Venus** and **Orion Nebula** ensured a memorable viewing experience for kids and adults alike.

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Member Profile: Steve & Betty Bentley. Steve and Betty – she's the pretty one – are retirees, married for 30 years and living in Forsyth. They have two married daughters (**Kim** and **Terri**), and five grandchildren.

Although Betty & Steve regard themselves as beginners in astronomy, their observing equipment – a 6" Meade 6600 reflector, a 10" Meade LX200GPS and an 18" Obsession Dob – belie that fact. Not surprisingly, they enjoy observing. Steve's goal is "to learn more about astronomy and help introduce others to the science." They've been members in FRAC for about a year. They are far more valuable to the club than they ever could imagine.

Betty's other interests include sewing and cooking; Steve's are motorcycle repair and operating a ham radio.

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Gazing up at the stars, for the first time, the first, I laid my heart open to the benign indifference of the universe.

-Albert Camus, *The Stranger* (1946)

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Upcoming Meetings/Activities. What a busy month April will be!

The speaker for our April meeting, which will be held at 7:30 on **Thurs., April 12th**, will be **Steve Knight**, who will talk about the status of preparations for this month's **Georgia Sky View** star party.

Then, on **Fri.-Sat., April 13th-14th**, we'll hold our monthly Cox Field observings. Regardless of the weather conditions, you can rest assured that, if you're not there, (a) the skies will be as clear as glass, and (b) **you'll** be the main topic of conversation. (This month's projected topic: "**David (Dracula) O'Keeffe**: Does He Sleep in That Coffin He Brings Out to Cox Field?")

Our **Ga. Sky View 2007** star party will run from **Thurs.-Sun., Apr. 19th-22nd**. (See **Curt's** "President's Message" on p. 1 and "It's Heeeeeeeere!" on p. 4 for more about GSV. All we'll say here is, you need to be there.)

Finally, there's the **Great Griffin Mayfling** arts & crafts festival at City Park in Griffin on **Sat., Apr. 28th** and **Sun., Apr. 29th**. We'll have a tent available and will show the **Sun** and talk about astronomy to passersby on both days. Hours are from **10 a.m.-6 p.m. (Sat.)** and **11 a.m.-5 p.m. (Sun.)** (See p. 3 for more on public observings.)

To get to City Park from, say, Jonesboro, come S on U. S. Hwy 19/41 like you're going to Cox Field, but get off at the Ga. Hwy. 16 exit (Newnan/Griffin). Turn left, cross the overpass above 19/41, and stay on Hwy. 16 (street signs refer to it as Taylor St.) for 1.4 mi. After you cross a RR viaduct, 9th St. will be on your right. Make a right turn onto 9th; that street

leads to the park, 0.5 mi. away. Look for the hospital on the left and a broad curve to the right that takes 9th St. into the park.

If you're coming from, say, Forsyth (hint, hint, **Steve & Betty**) or anywhere S or E of Griffin, cross or get off I-75 at the Griffin-Jackson exit (Ga. Hwy. 16), turn left and stay on Hwy. 16 past KFC and First Baptist Church, both of them on your left. After you pass Burger King on the left, turn left at the next street on the left (9th St.). Stay on 9th St. all the way to the park as noted above.

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This 'n That. From our "**Better Late Than Never**" **Dept.:** Although too late for inclusion in our March elections, **Curt** has recommended that **Felix Luciano** be nominated at the April meeting for a position on FRAC's Board of Directors for the upcoming year. Felix has agreed to serve if elected – as we fully expect that he will be, given his warm, dynamic personality and his unabashed love for FRAC and astronomy. (Of course, there *is* the nettlesome problem of Felix's inability to account precisely for his whereabouts throughout the period when prisoners were being tortured at Abu Ghraid, but still...)

Knowing Felix as we do, we'll give him the benefit of the doubt, the same way we believed **Larry Higgins** when he said he'd never been to Chappaquiddick and wasn't in the car with **Ted Kennedy** and **Mary Jo Kopechne** on that fateful evening.)

***Matt McEwen** has been contacted by *Sky & Telescope Magazine* about writing an article with photos of the stunning 10" Dob he built. Matt is bringing that 'scope to GSV, so if you haven't seen it yet, be sure to scope it out sometime during that weekend.

We'll keep you posted as to when Matt's article will appear in *S&T*. Congratulations, Matt, on a job exceedingly well done!

*Has anyone else besides **yrs. truly** noticed how many **Steve's** we have in FRAC? There's **Steve Knight**, of course. And **Steve Bentley**. Our new

member, **Steve Mann**. **Steven Smith**, who goes by “**Smitty**.” And last, but certainly least, **Steve Walburn**. (Okay, his name is **Ken**, not Steve, and he hasn’t been to a club meeting or observing since 1935. Ken is a nice guy, no matter what his wife **Doris** says, and everybody in FRAC who knows Ken, likes him. Except **Larry Higgins**. And **yr. editor**. And **John Wallace**, and **Steve Knight** and **David Ward** and everybody else in FRAC who knows Ken.)

*Since we haven’t done so lately, perhaps we should mention to our newer members (who may not yet have experienced the joy of showing the sky to visitors) how exciting it is to be a part of our public observings.

Few experiences in astronomy can match the thrill of hearing kids’ excited “Wow!”s or “Hey, Dad, come here, you gotta see this!” when you’ve shown them **Saturn** or other celestial objects that they’ve never seen before except maybe in photos.

You should know, too, that neither (a) a lack of previous experience in observing, (b) the quality or size of your telescope or binoculars, nor (c) the level of your knowledge regarding the objects you’re showing visitors, matters at all.

Regardless of how little you may think you know about the night sky and astronomy, you know more about it than 99% of your visitors do. Representing FRAC at a public observing automatically qualifies you as an “expert astronomer” in the minds of those you show the sky to. Anyway, there’s nothing wrong with admitting that you don’t know the answer to a visitor’s question, or asking a veteran observer such as **Smitty** or **Felix Luciano** for help in answering the question. None of us is expected to know everything about anything in astronomy – and that’s good, too, because we don’t. (Except **Prof. Stargazer**, that is.)

Still...

If necessary, we’ll find objects for you (or show or tell you how to find them), and we’ll tell you what your viewers need to know about what they’re seeing. You can even use **yr. editor**’s telescope if you like – and that goes for our club observings at Cox Field, too.

The important thing for you to remember, at club or public observings, is, *You’re not alone in this.*

We’re a team, and if you’re willing to be a part of our team, we’re more than willing to give you all the help you need.

So we’ll offer you this challenge, newcomers to FRAC: *If you attend even one of our upcoming public observings, you’ll be hooked on them from the first time you hear the excited responses of visitors to whatever you’ve shown them.* If you don’t believe it, ask **Felix Luciano** or **Smitty** if every word we’ve written here isn’t true.

And then try it yourself. You’ll find the experience far more rewarding than you’d ever imagined it would be.

*Those in FRAC who knew him were saddened at the news of the recent death of Chiefland Astronomy Village founder **Billy Dodd** after a long illness. Said **Smitty**: “We can all only hope to aspire to the level of Billy’s outlook on life. What a card and a good-natured person he was!”

***An Important Note from Yr. Editor.** In the past couple of months, I’ve had 2-3 members mention in casual conversations that, for undetermined reasons, they hadn’t received one or more recent newsletters.

If you fall into that category, whether now or at any time in the future, please remember that *the problem cannot be resolved unless you tell me about it – and the sooner, the better!*

The usual culprit is an incorrect e-mail address. Regardless of the cause, however, the effect will be minimal if you contact me promptly. (My phone no. and e-mail address appear on p. 1 of every issue of *The Observer*.)

Preparing a monthly newsletter is both time-consuming and challenging; making it interesting, informative and fun to read is a goal that I take very seriously. Still, my work is not done until you have the latest issue of *The Observer* in your possession.

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The Sky In April. Hold on a minute...

Okay, we just went outside to make sure, and -- Yep, the sky’s still there! With the pollen count so high lately, though, those little yellow things that have

been dotting your eyepiece view may not all have been stars.

Anyway, **Venus** will be up in the W sky for about 2 hrs. after sunset in April, **Saturn** will be up all night in the S and SW, and **Jupiter** will wait till midnight, give or take an hour, to make its appearance in the E.

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Perhaps the immense Milky Way, which on clear nights we behold stretching across the heavens, this vast encircling ring in which our planetary system is but a molecule, is in turn a cell in the Universe, in the Body of God.

-Miguel de Unamuno

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It's Heeeeeeere: GEORGIA SKY VIEW 2007

As anyone who hasn't been living under a rock knows, it's time for FRAC's fourth annual **Georgia Sky View 2007** star party. The first three installments were so fabulously successful that coordinator **Steve Knight** decided to add a day to it this time around, making this year's shindig a 3-night, 4-day weekend fest.

The dates: **Thurs.-Sun., April 19th-22nd**.

The location: **Camp McIntosh**, located adjacent to Indian Springs State Park near Jackson, Ga.

This year's event will feature:

*Door prizes;

*Vendors (so you can buy astronomy stuff you couldn't afford earlier and still can't afford but you're going to buy anyway because it's a star party, dadgummit, and that's what you **do** at star parties!);

*Speakers, including: FRAC's **Larry Higgins**, **Felix Luciano**, **Dr. Richard Schmude** and **yr. editor**; and the Atlanta Astronomy Club's **Phil Sacco** and **Rich Jakiel**;

*A live concert by **Jonn Serrie**;

*Three glorious nights of perfectly clear skies for observing (with a stand-by trivia contest in reserve in case the weatherman lied to us); and

*Late-night munchies available.

Your participation in GSV is very important, since the basis for any successful star party is the host club's members. Volunteering to help with setup on Thursday morning, site maintenance during the event and/or take-down on Sun. morning would be nice, but the bottom line is your willingness to show your support for FRAC by attending the event.

If you've never before attended a star party, you might expect the attendees to be stuffed-shirts who look down their noses at anyone who doesn't have a telescope as large as theirs.

Uh-uh. Wrongo-bongo.

There may occasionally be a couple of unapproachable individuals like that, but the vast majority of attendees are ordinary guys and gals like you and me, folks who share a common love of the night sky and astronomy. Like us, they enjoy getting together and talking about and admiring each other's 'scopes, equipment and the like. As **Steve K.**, the guiding light behind each of the GSV get-togethers, has said, "Some of the nicest people I've ever met have been at star parties. Attending events like **Ga. Sky View** gives me the chance to renew old friendships and make new ones."

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Prof. Stargazer Takes On Einstein

And now, astronomy buffs, it's time for another visit with one of history's most brilliant and complex thinkers, **Prof. Theophilus** (pronounced: The awfulest) **Stargazer**. Prof. Stargazer is generally regarded as the equal of such intellectual giants as **Sir Isaac Newton** and **Stephen Hawking** in such important respects as gender (all of them males), number of fingers, toes, arms and legs (one complete set per customer) and depth of thinking (knee-deep, in the professor's case).

Recently, six FRAC members visited the learned professor to draw upon his insights into the holy grail and bedrock of cosmology, i.e., **Albert Einstein's** General and Special Theories of Relativity.

Larry Higgins: In writing that “Time is relative to the observer,” Professor, what exactly did Einstein mean?

Prof. Stargazer: As you know, Larry, Einstein’s theories are infinitely complex and far-reaching in their implications for the universe.

In saying that *time is relative to the observer*, Al was warning us that, when our in-laws are coming to visit, they’re gonna stay forever – or at least it’ll seem that way to us.

Smitty: Can you give us an example of the relativity of time, Professor?

Prof. Stargazer: I thought I just did that. Oh well, here’s another example. I’ll try to make it simple enough that even **Larry Higgins** and **Ken Walburn** can understand it. So here it is, framed as a question: *Which takes longer, the IRS to send your income tax refund, or your son’s orthodontist to decide how to spend it?*

Joel Simmons: Is it true that, as Einstein put it, “Even inanimate objects contain dormant energy”?

Prof. Stargazer: Yes it is, Joel – although you’d never know it to look at my dead-beat brother-in-law sprawled out in front of the TV. The sofa has more dormant energy than he does.

Felix Luciano: What about Einstein’s statement that “Moving bodies acquire mass as they increase in speed”?

Prof. Stargazer: It’s certainly true in my case, Felix. The more I exercise, the more weight I gain. Only a genius like Einstein would have factored *appetite* into an equation.

Steve Bentley: Speaking of equations, Professor, what does Einstein’s famous equation, $E=mc^2$, mean in laymen’s terms, sir?

Prof. Stargazer: Gee, don’t you guys in FRAC know anything about anything? Okay, I’ll cross the

eyes and dot the tees – Did I get that right? – and spell it out for you.

E (Entertainment) = **M. C. (Hammer, of course)** – and he definitely ain’t no **square!**

Betty Bentley: Are you sure about that, Professor?

Prof. Stargazer: Relatively.

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Ga. Sky View Equipment/Supplies Checklist

This checklist, basic though it might be, is to remind you of what you might want to bring with you to our star party – and once there, it will remind you of what you brought and want to take home. (**Don’t** bring a Coleman lantern or oil lamps: the chemicals they emit can damage optical coatings.)

Camping Gear

- *Tent/camper/RV/etc.
- *Sleeping bag/cot/air mattress/blankets/sheets/etc.
- *Food/snacks/etc.
- *Cooking gear, equipment (e.g., plates, cups, eating utensils)
- *Cooler or thermos (with ice)
- *Toiletries (e.g., Visine, No-Doz, toothpaste)
- *Observing table, chairs
- *Insect repellent, suntan lotion/sun block
- *Flashlight (white beam)
- *Tarp (to cover telescope when unused)

Clothing

- *Cool daytime clothing (e.g., shorts)
- *Warm late-night clothing (e.g., long pants, sweatshirt)
- *Raincoat
- *Extra pair of shoes, socks
- *Sunglasses

Observing Equipment

- *Telescope
- *Binoculars
- *Eyepieces

- *Filters (solar, nebular)
- *Telrad/finderscopes
- *Extra batteries (of every size needed for your equipment)
- *Flashlight (red beam)
- *Dew shields
- *Collimating tools
- *Other tools (e.g., screwdriver[s], Allen wrenches)
- *Coated lens cleaner
- *Camera, tripod, film
- *Star charts, observing plan
- *Notebook, pencils/tape recorder

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Early Bird Gets the Worm or “Black Hole Breakfast”

by Dr. Tony Phillips

We all know that birds eat worms. Every day, millions of birds eat millions of worms. It’s going on all around you! But how often have you awakened in the morning, stalked out in the dewy grass, and actually seen a bird having breakfast? Even though we know it happens all the time, a bird gulping a worm is a rare sight.

Just like a black hole gulping a star...

Every day in the Universe, millions of stars fall into millions of black holes. And that’s bad news for the stars. Black holes exert terrible tides, and stars that come too close are literally ripped apart as they fall into the gullet of the monster. A long burp of X-rays and ultraviolet radiation signals the meal for all to see.

Yet astronomers rarely catch a black hole in the act. “It’s like the problem of the bird and the worm,” says astronomer Christopher Martin of Caltech. “You have to be in the right place at the right time, looking in the right direction *and* paying attention.”

A great place to look is deep in the cores of galaxies. Most galaxies have massive black holes sitting in their

pinwheel centers, with dense swarms of stars all around. An occasional meal is inevitable.

A group of astronomers led by Suvi Gezari of Caltech recently surveyed more than 10,000 galactic cores—and they caught one! In a distant, unnamed elliptical galaxy, a star fell into a central black hole and “burped” a blast of ultraviolet radiation.

“We detected the blast using the Galaxy Evolution Explorer (GALEX), an ultraviolet space telescope,” explains Gezari. Her team reported the observation in the December 2006 issue of *The Astrophysical Journal Letters*. “Other telescopes have seen black holes devouring stars before,” she adds, “but this is the first time we have been able to watch the process from beginning to end.”

The meal began about two years ago. After the initial blast, radiation diminished as the black hole slowly consumed the star. GALEX has monitored the process throughout. Additional data from the Chandra X-ray Observatory, the Canada-France-Hawaii Telescope and the Keck Telescope in Hawaii helped Gezari’s team chronicle the event in multiple wavelengths

Studying the process in its entirety “helps us understand how black holes feed and grow in their host galaxies,” notes Martin.

One down, millions to go.

“Now that we know we can observe these events with ultraviolet light,” says Gezari, “we’ve got a new tool for finding more.”

For more on this and other findings of GALEX, see www.galex.caltech.edu. For help explaining black holes to kids, visit The Space Place at spaceplace.nasa.gov.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.



Caption:

In this artist's concept, a giant black hole is caught devouring a star that ventured too close.

Note to editors:

*A high-resolution version of this image may be downloaded from
http://spaceplace.nasa.gov/news_images/black_hole_breakfast.jpg*