

The Flint River Observer

Newsletter of the Flint River Astronomy Club

March 2006

Vol 10 No 1

Officers: President, **Steve Knight:** sdknight@flintriverastronomy.org
Vice President, **Steven (Smitty) Smith:** Saratoga@flintriverastronomy.org
Secretary, **Doug Maxwell:** doug@flintriverastronomy.org
Treasurer, **Dawn Knight:** sdknight@flintriverastronomy.org
Board of Directors: **David Ward:** dward@flintriverastronomy.org **John Wallace:** JWCOSMOS@att.net and **Scott Hammonds:** Scott@creatorsview.com
Public Observing Liaison: **Felix Luciano:** felix.luciano@flintriverastronomy.org
Webmaster: **David Ward** Webmaster (see above);
Club Librarian: **Curt Cole:** 24e29d55c@speedfactory.net
Event Photographer: **Doug Maxwell** (see above)

Club mailing address: 114 Central Lake Cir. Griffin, GA 30223.

Web page: www.flintriverastronomy.org

Discussion group: FRAC@yahogroups.com

Please notify **Dawn Knight** if you have a change of address, telephone number and or new e-mail address.

President's Message: Normally, my message covers upcoming events, recent happenings, or just my thoughts on the state of things in the club. But with this being my last President's message, I wanted to take this chance to thank those that deserve it. I personally thank all of you for staying with the club, attending events, and just going on as normal, but there are a few that have really stood out. Doug, even though he's been distracted as of late what with his recent aviation reintroduction, but as one of the most devoted members of the club, he brings a feeling of balance with unwavering common sense, open eyes and a good feeling for what's right. Felix, stepped up and took over the largest part of the newsletter, he's been our public observing contact for years now. He's been another of my confidants, and has been there when needed with the right words or just a smile and nod, which is sometimes all that's needed. Chuck, whose laid back manner and brutally honest opinions have brought perspective where needed. He looks at things differently, and if you want to know, all you have to do is ask. Smitty, again as laid back as you can get, has that old time horse sense that's a rare find today. A charter member of the club, he's been active in most every FRAC event, and will always be one of the first to step up and do what's needed for the club. Curt, whose recent increase in involvement has been a breath of fresh air, has a devotion and passion that the club really needs. He has accepted the nomination for President and I think will be one of the best things that has ever happened to the club. New ideas, new direction and a new future for the club. Last, but certainly not least is Dawn. She is the one that helped me keep my sanity during the crisis last year, and the one that kept me going when I wanted to just give up and walk away. They say that behind every good man is a better woman, and she's the

best. She made all of my ideas better, and most of the things I've gotten credit for she did. I owe her the most, as she bore the brunt of my problems last year. The future is bright for FRAC. The Sky View is shaping up nicely, and good ideas are coming down the pipe. I'm really interested in seeing where things go from here. I've really enjoyed my time in office, and it was a real honor to serve you. Thank you all, and clear skies.

Club Calendar: March 3 – 4, Cox Field Observing; March 9, Club Meeting, UGA Experiment Station, (We will be voting in new officers so make your plans to attend); March 11, Girl Scout Observing, Luthersville; March 24 – 25, Cox Field Observing; March 31 – April 1, Cox Field Observing; March 31 – April 1, Tennessee Spring Star Party

Membership Renewals: All renewals are due during the month of February. If you have not sent in your dues this will be your last newsletter.

Observing report by Felix Luciano:

We were scheduled to take another short vacation to Puerto Rico to visit our families (late January to early February). I checked the weather channel web site so to have an idea on how the weather would be during the days we were to be home. My Mom had told me that there was not much rain but just about every day was a cloudy, overcast day. I decided not to take the scope and instead bring my 11X70 binoculars and the camera tripod along for the trip.

As expected, most of the evenings were completely clouded over. However, towards the end of our vacation the weather cooperated and we had a couple of clear nights. We are located in a "somewhat" countryside but development is creeping in. Still the skies to the South and Southeast are pretty dark.

To give you an idea of the VLM, M46 and M47 are very close to being naked eye objects. You can see a nice patch, glow of light at that location. Using the binoculars brings out a large, irregular splash of bright stars very close to a faint semi-roundish nebulosity. I spent a lot of time just gazing at M46 & M47, trying to squeeze all the photons I could from those two objects.

You first notice that Orion is located close to being overhead. It sure looks like it is about to take a dive over your head. There are lots of other groups of stars around the south of Orion that I have not seen from my home location. Back to Orion, M42 is a large bright patch of light with traces of nebulosity extending out from the main nebula. M78 shows itself as a semi-bright glow but distinguishable.

M41 is a large and irregular splash of lots of bright components. M93 is a small bright patch of light. The Beehive Cluster is also a large irregular grouping of stars and Saturn is located "right next" to it.

There are "new" groupings of stars and or constellations that I am not familiar with and I don't have a good set of charts with me to be able to identify those "new"

objects. I ran across several clusters and some star groupings that looked very interesting. A good set of charts is going to be a must have on the next trip. I sure enjoyed seeing that area of the Southern skies and can only dream of spending a little more time on that southern hemisphere.

Clear Skies to all.

NOTE: We went to see the IMAX movie "Roving on Mars" at the Mall of Georgia. Excellent graphics, sound effects and interviews of some of the people responsible for getting the rovers there. That screen is huge. If you are in the area go see it, highly recommended.

Astronomy News:

NASA'S SPITZER FINDS VIOLENT GALAXIES SMOTHERED IN 'CRUSHED GLASS'

NASA's Spitzer Space Telescope has observed a rare population of colliding galaxies whose entangled hearts are wrapped in tiny crystals resembling crushed glass.

The crystals are essentially sand, or silicate, grains that were formed like glass, probably in the stellar equivalent of furnaces. This is the first time silicate crystals have been detected in a galaxy outside of our own.

"We were surprised to find such delicate, little crystals in the centers of some of the most violent places in the universe," said Dr. Henrik Spoon of Cornell University, Ithaca, N.Y. He is first author of a paper on the research appearing in the Feb. 20 issue of the *Astrophysical Journal*. "Crystals like these are easily destroyed, but in this case, they are probably being churned out by massive, dying stars faster than they are disappearing."

The discovery will ultimately help astronomers better understand the evolution of galaxies, including our Milky Way, which will merge with the nearby Andromeda galaxy billions of years from now.

"It's as though there's a huge dust storm taking place at the center of merging galaxies," said Dr. Lee Armus, a co-author of the paper from NASA's Spitzer Science Center at the California Institute of Technology in Pasadena. "The silicates get kicked up and wrap the galaxies' nuclei in giant, dusty glass blankets."

Silicates, like glass, require heat to transform into crystals. The gem-like particles can be found in the Milky Way in limited quantities round certain types of stars, such as our sun. On Earth, they sparkle in sandy beaches, and at night, they can be seen smashing into our atmosphere with other dust particles as shooting stars. Recently, the crystals were also observed by Spitzer inside comet Tempel 1, which was hit by NASA's Deep Impact probe (<http://www.spitzer.caltech.edu/Media/releases/ssc2005-18/release.shtml>).

The crystal-coated galaxies observed by Spitzer are quite different from our Milky Way. These bright and dusty galaxies, called ultraluminous infrared galaxies, or "Ulirgs," are swimming in silicate crystals. While a small fraction of the Ulirgs cannot be seen clearly enough to characterize, most consist of two spiral-shaped galaxies in the process of merging into one. Their jumbled cores are hectic places, often bursting with massive, newborn stars. Some Ulirgs are dominated by central supermassive black holes.

So, where are all the crystals coming from? Astronomers believe the massive stars at the galaxies' centers are the main manufacturers. According to Spoon and his team, these stars probably shed the crystals both before and as they blow apart in fiery explosions called supernovae. But the delicate crystals won't be around for long. The scientists say that particles from supernova blasts will bombard and convert the crystals back to a shapeless form. This whole process is thought to be relatively short-lived.

"Imagine two flour trucks crashing into each other and kicking up a temporary white cloud," said Spoon. "With Spitzer, we're seeing a temporary cloud of crystallized silicates created when two galaxies smashed together."

Spitzer's infrared spectrograph spotted the silicate crystals in 21 of 77 Ulirgs studied. The 21 galaxies range from 240 million to 5.9 billion light-years away and are scattered across the sky. Spoon said the galaxies were most likely caught at just the right time to see the crystals. The other 56 galaxies might be about to kick up the substance, or the substance could have already settled.

Others authors of this work include Drs. A.G.G.M. Tielens and J. Cami of NASA's Ames Research Center, Moffett Field, Calif.; Drs. G.C. Sloan and Jim R. Houck of Cornell; B. Sargent of the University of Rochester, N.Y.; Dr. V. Charmandaris of the University of Crete, Greece; and Dr. B.T. Soifer of the Spitzer Science Center.

The Jet Propulsion Laboratory manages the Spitzer Space Telescope mission for NASA's Science Mission Directorate, Washington. Science operations are conducted at the Spitzer Science Center. JPL is a division of Caltech. Spitzer's infrared spectrograph was built by Cornell University, Ithaca, N.Y.. Its development was led by Dr. Jim Houck.

Member Profile by Curt Cole:

I've heard it mentioned that we often don't know much about our fellow FRAC members, other than that they share an interest in astronomy. This is particularly true of those who aren't able to frequently attend meetings or observing sessions. Just about everybody has led an interesting life, been places, done things, that the rest of us would like to hear about. In an effort to find out more about each member, I'll give everybody an opportunity to fill out a form called "Member Profile." Then I'll twist their arm for further detail about what background and interests each person has. This is the first

of what I hope to be a series of member profiles to appear in this newsletter. Its frequency will depend on the level of participation from the membership, and the order of publication will be random.

This month's member profile will be about Dawn Knight, FRAC's trusty treasurer. Originally from College Park, Georgia, she's lived in the Atlanta area all her 30+ years. She had an interest in drafting and during high school worked as an intern in that capacity, so she went on to get an Associates degree in Architectural Drafting. But like many folks, she found herself in a different profession after graduation. She has been with the College Park Police Dept. for over a decade, holding down the fort at headquarters as clerk.

Now an intermediate astronomer, Dawn got interested in astronomy in '99, when her husband Steve got his first real scope, a 4.5" Celestron. Prior to that she had absolutely no interest in the hobby. 1999 is also the year she and Steve joined FRAC. Once she got interested, she got a 14" Discovery Dob. They also recently got a 6" Hardin. She's since made good use of the scopes, earning numerous pins, including Messier, Double Star, Caldwell, Bino Messier and Universe Sampler. She and Steve regularly attend star parties, particularly Chiefland and Tennessee and most importantly Georgia Sky View.

Besides astronomy, Dawn spends time tromping around the countryside with a GPS, hunting for geocaches. The most interesting thing she's found so far is foreign coins, particularly Euros. For years she's been fond of bears. She collects anything bear-related. Her house has stuffed bears, ceramic bears, bear towels and lots more. In the Smokies, she's seen 'em up close in the wild. Her fondness for animals isn't limited to bears though. She has a couple of mixed black lab/ Australian shepherds, and an American Eskimo dog as well.

Dawn's been doing a great job as club treasurer and is fun to be around. Next time you see her, say hi and get her to tell you about her "Close Encounters of the Bear Kind."

Make Your Voice Heard with Better Postings by Curt Cole:

What's the purpose of voice, print, and electronic communication? To get our viewpoint or information across. To get our two cents in. If we can't get people to listen to our message, we'll fail to get our point across. I often see such failures on the internet. Some businesses make their websites so bandwidth intensive that many folks give up waiting on it to download. That's sales--and money-- lost. It's

cool to put lots of bells and whistles on websites, but that can defeat the purpose, which is to get people to view it so that information can be conveyed. Message postings, such as on Yahoo Groups, is another place where we sometimes fail to get people to listen to us. We're too vague with our messages. The result is that busy or impatient people ignore the message. This article is about how to get people to listen to your message.

Most of us lead busy lives. Between families, work and hobbies, it's hard to squeeze it all in. One thing most of us do is spend time on a computer--some for research, some for entertainment. When we're on it for entertainment, time may not be of much concern. But if it's for research--maybe to find out what's going on in astronomy--we are more likely to want to get on, get the news, and get off so that they can work on the next task ("Honey, have you taken out the garbage?"). In message postings on a Yahoo Group for instance, I try--sometimes successfully, sometimes not--to: 1. Get my message read and understood, and 2. Be considerate of other people's time. We can achieve both points by being clear and up front about what the message is. We do that in the subject heading and in the first sentence of the message body. That way the reader can tell at a glance whether or not the message is of interest, and also whether or not he has time to open it. A subject heading that reads "New Titan photos at this URL" is better than one that reads "Hey guys, check this out!" The former is clear and to the point. And the reader can tell that since its photos, it may take a while to download. So he may save it for when he has more spare time.

On Yahoo groups and other forums, there are often large numbers of subject headings to look at. Take the FRAC Yahoo group for instance. On January 4th, 2006, the 5,000th message was posted. During the month of May, 2004 there were 264 messages posted on the FRAC group. That's 8 or 9 a day. If somebody only checks the messages once a week or so, they have so many messages to go through that they're likely to only look at the ones that seem of most interest to them. As I look through the subject headings on the FRAC Yahoo group as well as other groups, I sometimes have a hard time figuring out what they're about. Therefore, if I'm short of time, many are never looked at. Those are voices lost. People with good ideas or interesting things to say. But there's just not enough time in the day.

In Yahoo groups, we can view some message information before opening it. It can be seen in Simple or Summary view. In Simple view, only the subject heading can be seen. To make yourself heard, be as clear and detailed in the subject heading as you can before the heading gets truncated. You can often get 8-10 words (80 characters) in the heading before it gets cut off. Our FRAC Yahoo group will wrap to at least two lines of text for the heading. In Summary view, in addition to the subject heading, the first line of the message body displays. So make use of the first sentence to further clarify what your message is. Don't repeat info that's already in the subject heading. It's wastefully redundant.

In working on ways to attract new members to the club, I came across Astronomyforum.net, which contains a forum, Beginners Corner, for folks new to

astronomy. There are 3,500 messages on it and it looks like it probably has some good info for newbies, but there's a problem that is common to postings. Here's some subject headings I saw: "Please Help!"; "Suggestions"; "Rookie needs help." These are vague. Please help with what? Suggestions about what? What kind of help does the rookie need? It takes time to open the message and read it. If there are dozens of messages, your question may get passed over, especially by folks with dialup or just plain busy folks. An experienced person may look at the list and be willing to help out, but if he has time constraints, he may skip a message that says "Please help!" or "Suggestions" and go to one that says "How do I collimate an 8" Dobs". The latter is specific and he knows whether or not he can offer help.

If you post a date-sensitive message, keep in mind that some people may not look at it till a week or two later. So instead of saying "Unscheduled meeting Tuesday", better to say "Unscheduled meeting Tuesday, Feb. 7." That way you won't waste the time of the late viewer who doesn't see it 'til Monday the 13th. Even though on most forums or groups the messages have a date of posting associated with them, it's faster and more convenient for the reader to see that info right off the bat in the header. Being considerate of other people's time takes very little extra effort. And in the case of the FRAC group, it's mostly our friends whose time we'll be taking up. So who better to be considerate of?

One thing I often see is people changing subjects in the middle of a message. For example, someone might post a message with a subject heading of: "60mm Refractor For Sale." Then in the message, after they give details about the scope, they might mention that there is an eclipse coming up in three days. If I'm not in the market for a 60mm refractor, I won't open the message, therefore I won't know about the eclipse. So your eclipse information would get a wider audience if you posted it into a separate message with an appropriate subject heading.

If it's a forum for a particular topic, stay on topic! If your E-mail is off topic or only for one person, it's usually more considerate of the group to send it to the individual rather than post it to the group.

To sum up:

Make maximum use of the subject heading to clearly convey your message's subject.

Use the first sentence of the message body to further clarify the message's subject. Don't change subjects in the middle of a message. Post a new message for that.

If it's a topic-specific forum, stay on topic.

Review old message headings. If you can't make heads or tails of it, don't repeat the same mistake.

March

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
			1	2	3 Cox Field Observing	4 Cox Field Observing
5	6 First Qtr Moon	7	8	9 Club Meeting	10	11 Girl Scout Observing
12	13	14 Full Moon	15	16	17	18
19	20 Spring Equinox	21	22 Last Qtr Moon	23	24 Cox Field Observing	25 Cox Field Observing
26	27	28	29 New Moon	30	31 Cox Field Observing	

2006