

# STAR STUFF

The Newsletter of the Ford Amateur Astronomy Club

Volume 19, Number 11

November/December 2010

#### In This Issue

#### **Page One**

Blue Rings around Red Galaxies

**Presidents Corner** 

#### **Inside Stuff**

**5 Treasurers Report** 

5 Meeting Agenda

**5 Misc Notes** 

6 Astro-Imaging SIG

**6 Classifieds** 

7 Sirus Award

**8 Time to Renew** 

8 HJRO Observatory Report

9 HJRO 2010 Photo Montage

# Blue Rings around Red Galaxies

by Trudy E. Bell and Dr. Tony Phillips

Beautiful flat rings around the planet Saturn are one thing—but flat rings around entire galaxies?

That is the astonishing discovery that two astronomers, Samir Salim of Indiana University at Bloomington and R. Michael Rich of UCLA described in the May 10, 2010, issue of The Astrophysical Journal Letters.

"For most of the twentieth century, astronomers observing at visible wavelengths saw that galaxies looked either 'red and dead' or 'blue and new,'" explained Salim. Reddish galaxies were featureless, shaped mostly like balls or lentils; bluish ones were magnificent spirals or irregular galaxies.

Elliptical galaxies looked red, astronomers reasoned, because they had mostly old red giant stars near the end of their life cycles, and little gas from which new stars could form. Spiral and irregular galaxies looked blue, however, because they were rich in gas and dust that were active

nurseries birthing hot, massive, bluish stars.

At least, that's how galaxies appear in visible light.

Continued On page 3

# Support Your Club President's Corner

This is the last StarStuff Newsletter that will be published, unless we have someone in the club volunteer to take over editing the StarStuff. I would like to thank Greg Knekleian for his efforts as editor of the StarStuff Newsletter for the past year. Greg has informed the FAAC Board that he will resign his editor position after the December issue.

Continued On page 2

### STAR STUFF

Nov/Dec 2010 - Vol. 19 No 11

**STAR STUFF** is published eleven times each year by:

FORD AMATEUR ASTRONOMY CLUB P.O. Box 7527 Dearborn MI 48121-7527

PRESIDENT: VICE PRESIDENT: SECRETARY: Doug Bauer Chuck Jones

Lori Poremsky / Kevin Medon

TREASURER: Gordon Hansen WEBMASTER: Greg Ozimek NEWSLETTER EDITOR: Greg Knekleian

#### **Club Information:**

The Ford Amateur Astronomy Club(FAAC) meets on the fourth Thursday each month, except for the combined November/ December meeting on the first Thursday of December - at Henry Ford Community College Administration Services and Conference Center in Dearborn. Refer to our website for a map and directions (<a href="https://www.boonhill.net/faac">www.boonhill.net/faac</a>).

The FAAC observes at Spring Mill Pond within the Island Lake State Recreation Area near Brighton, Michigan. The club maintains an after-hours permit, and observes on Friday and Saturday nights, and nights before holidays, weather permitting. The FAAC also has use a private observing site near Gregory Michigan and lake Erie Metro Park. See the FAAC Yahoo Group\* for more information.

Observing schedules and additional info are available on our website, or via the FAAC Yahoo Group.\* Or call the FAAC Hotline, for info and leave a message, or ask questions: 248-207-2075. or send email inquiries to <a href="mailto:fordastronomy@comcast.net">fordastronomy@comcast.net</a>.

Membership in the FAAC is open to anyone with an interest in amateur astronomy. The FAAC is an affiliate of the Ford Employees Recreation Association (F.E.R.A.). Membership fees:

Annual - New Members: \$30 (\$15 after July 1) Annual - Renewal: \$25 (\$30 after January 31)

Membership includes the STAR STUFF newsletter, discounts on magazines, discounts at selected area equipment retailers, and after-hours access to the Island Lake observing site.

#### Astronomy or Sky & Telescope Magazine Discounts

Obtain the required form from the FAAC club treasurer for a \$10 discount. Send the completed form directly to the respective publisher with your subscriptions request and payment. Do not send any money directly to the FAAC for this.

#### Star Stuff Newsletter Submissions

Your submissions to STAR STUFF are more than welcome! Send your story and/or images to the editor at <a href="mailto:pwideo@aol.com">pwideo@aol.com</a>. Email text or MS Word is fine. STAR STUFF will usually go to press the weekend prior to each general meeting. Submissions received prior to that weekend can be included in that issue.

\* FAAC Members are welcome to join our Ford Astronomy Club Yahoo!Group. Messages photos, files, online discussions, and more! URL: groups.yahoo.com/group/FordAstronomyClub.

This months background photos of the moon Page 1 courtesy of John Kirchhoff. See more of John's photos at:

http://www.flickr.com/photos/ 33926475@N06/with/4311533997/

#### Presidents Corner (continued from Page 1)

We need to find someone to take over as editor if the StarStuff is to be continued. I thought I would give you some idea of what is involved in editing the StarStuff. It requires 6 - 10 hours per month. The editor is not responsible for writing articles, just putting the submitted articles into the StarStuff format and sending the Newsletter to the Webmaster to put on the FAAC Website. The articles come from a NASA website, the Club President, Secretary, and Treasurer, as well as others who submit articles and advertisements. All that is required is knowledge of MS-Word (or other publishing software, if you have a favorite). We current mail out 7 copies to members who do not have internet access, but that could be done by someone other than the editor. Generally, the editor sends a reminder to those who submit articles to make sure the article are submitted in time to put the newsletter together.

It would be a real shame to see this Newsletter end! Please let me know if you would be willing to take this on. The other club members will appreciate your efforts.

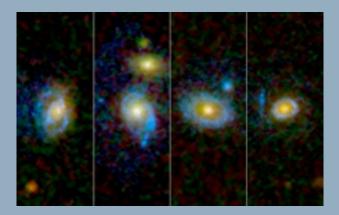
This is a good time to let everyone know what club members are doing to make this a functional club.

#### We have:

- President Doug Bauer
- Vice-president Chuck Jones
- Secretary Lori Poremsky / Kevin Medin
- Treasurer Gordon Hansen
- Webmaster Greg Ozimek
- Newsletter Editor Greg Knekleian
- Presentation Coordinators Jim Frisbie / Frank Ancona
- Imaging SIG Leader Gordon Hansen

(continued Page 6)

The Galaxy Evolution Explorer UV space telescope helped to identify red elliptical galaxies that also emitted the strongest UV. These are detailed, long-exposure Hubble Space Telescope images of four of these galaxies that capture the UV-emitting rings and arcs indicative of new star formation.



## Blue Rings around Red Galaxies (continued from Page I)

As early as the 1970s, though, the first space-borne telescopes sensitive to ultraviolet radiation (UV) revealed something mysterious: a few red elliptical galaxies emitted "a surprising ultraviolet excess," said Rich. The observations suggested that some old red galaxies might not be as "dead" as previously supposed.

To investigate, Salim and Rich used NASA's Galaxy Evolution Explorer satellite to identify 30 red elliptical galaxies that also emitted the strongest UV. Then they captured a long, detailed picture of each galaxy using the Hubble Space Telescope.

"Hubble revealed the answer," says Salim. The UV radiation was emitted by enormous, flat bluish rings that completely surrounded each reddish galaxy, reminiscent of the rings of Saturn. In some cases, the bluish rings even showed a faint spiral structure!for exoplanets is only just beginning, and the search for life is finally underway in earnest.

Because the bluish UV rings looked like starforming spiral arms and lay mostly beyond the red stars at the centers of the elliptical galaxies "we concluded that the bluish rings must be made of hot young stars," Salim continued. "But if new stars are still being formed, that means the red-and-dead galaxies must have acquired some new gas to make them."

How does a galaxy "acquire some gas?" Salim speculates that it was an act of theft. Sometimes galaxies have close encounters. If a gas-rich irregular galaxy passed close to a gaspoor elliptical galaxy, the gravity of the elliptical galaxy could steal some gas.

Further studies by Galaxy Evolution Explorer, Hubble and other telescopes are expected to reveal more about the process. One thing is certain, says Rich: "The evolution of galaxies is even more surprising and beautiful than we imagined."

The press release is available at <a href="http://www.galex.caltech.edu/newsroom/glx2010-03f.html">http://www.galex.caltech.edu/newsroom/glx2010-03f.html</a>. The full published article is "Star Formation Signatures in Optically Quiescent Early-Type Galaxies" by Samir Salim and R. Michael Rich, The Astrophysical Journal Letters 714: L290-L294, 2010 May 10.

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

# Presidents Corner (continued from page 2)

- Nominating Committee Jim Frisbie / Frank Ancona / Bob FitzGerald
- Beginner's Night Coordination John Kirchhoff / Gordon Hansen / Dennis Salliotte
- Astronomy At the Beach Bob MacFarland / George Korody / Greg Ozimek / Bob FitzGerald / John Schroer / Don Klaser / Gordon Hansen
- Outreach Coordination Bob MacFarland / Larry Halstead / Doug Bauer / Gordon Hansen / Jon Blum / Lori Poremsky / Don Klaser / John Schroer / Greg Knekleian / Tim Dey / Mohammed Mroue / John Kirchhoff
- Outreach Participation (we have supported over 33 outreach events in 2010) - Doug Bauer / Bob MacFarland / Gordon Hansen / Larry Halstead / John Kirchhoff / Jon Blum / Lori Poremsky / Kevin Medon / Don Klaser / John Schroer / Greg Knekleian / Mohamed Mroue / Tim Dey / Ken Anderson / Art Parent / Greg Ozimek / Bob FitzGerald / Dennis Salliotte / Chuck Jones / George Korody / John Connop / Clay Kessler / Doug Bock / Steve Uitti / Sandra Macika / Jim Barnes / Jonathan Kade / Jeff Hineline / Dave Wright / Larry Hoffman / Rich Pientak / Fred Flynn / Diane Worth / Brian Kutscher (and others I may have missed)
- Pop and Pizza for the club meetings Ellen Duncan and Greg Ozimek
- Annual Banquet Gordon Hansen / Pat Korody / George Korody
- Annual Club Picnic Doug Bauer / Greg Ozimek / Gordon Hansen / Lori Poremsky / Ken Anderson
- Coordination with HFCC Ed Halash
- Coordination with Lake Erie Metropark Dennis Salliotte
- Coordination with Island Lake Recreation Area – Ken Anderson

- Printing Agendas for Monthly Meetings Ken Anderson
- Ordering RASC Observing Handbooks Greg Ozimek
- Ordering Calendars Gordon Hansen
- Club Wear Diane Worth
- Equipment Manager Diane Worth
- FAAC Swap Meet Tom Blaszak / Larry Halstead / John Schroer / Chuck Jones / Frank Ancona / Gordon Hansen / Pat & George Korody / Bob MacFarland
- HFCC Planetarium Bob Clubb / Dennis Salliotte / Larry Halstead
- HJ Robinson Observatory Greg Knekleian, Tim Dey, George Korody, Mike Rouseau, Greg Ozimek
- Astronomy for Everyone Series Lori Poremsky, Kevin Medon, Don Klaser, John Schroer, Ken Anderson, Steve Uitti, the Crew at the Wyandotte Municipal Cable Studio

As you can see, it takes an army of people to keep this club active and fun. I am sure I missed a few people in this list, but your contributions are appreciated.

I want to thank everyone who has been involved in these and other activities and have invested their time and efforts for everyone's benefit!

If you have not been able to participate in these efforts, I invite you to take a step toward become more involved. We can use the help!

By the way, did I mention that we are looking for a new StarStuff Editor?
Thanks Again!!

Doug Bauer 
<u>DougBauer @Comcast.Net</u>

### Treasurer's Report November 22, 2010

By Gordon Hansen

Bank Accounts	
Checking	\$139.80
Savings	\$613.81
TOTAL Bank Accounts	\$753.61
Cash Account	
Cash	\$182.11
TOTAL Cash Account	\$182.11
Investment Accounts	
CD 1	\$1051.47
CD 2	\$1089.75
TOTAL Investment Accounts	\$2141.22
Asset Accounts	<u>'</u>
Equipment	\$1907.92
Scholarship	\$518.00
TOTAL Asset Accounts	\$2426.72
OVERALL TOTAL	\$5,503.66
Memos	ψ3,303.00
GLAAC.	\$1904.58
OLANG	\$150 <del>4</del> .30

### Have a CELSTRON CHRISTMAS

Think you will afford a new Celestron telescope next year but want one now? for Christmas. There's an APP for that!

There is an Application called that Celestron Glad Plug-in that gives that new-telescope smell where ever it is sprayed!

Should be on store shelves by the week of December 5.

- Submitted by Greg Ozimek

### Meeting Agenda - Dec 2nd

# HFCC –Berry Auditorium - Admin. Services & Conference Center

For map see: <a href="http://www.hfcc.edu/contact/campus maps.pdf">http://www.hfcc.edu/contact/campus maps.pdf</a>

5:30 PM

# Opening/Introduction/Member Observing Main presentation:

FAAC Image SIG Images

Gordon Hansen FAAC

Tech Talk:

Building a Lightbox

Milt Antonick FAAC

### Club Business/Secretary/Treasurer/ Equipment Reports

- Astro-Imaging SIG
- Dark Sky Committee

# **Club Projects/Committees/Member Support**

### December 2010

# General Meeting Slide Shows Will Be Great

by Greg Knekleian

This Month's General meeting will be featuring a wide variety of astronomy photographs from the FAAC Astrophotography SIG. Those who were able to attend last months SIG meeting saw a preview of the images that will be presented at this December's meeting. I've been to a few astrophotography meetings and I'm always impressed with the photos and discussions that ensue at these meetings. This month's meeting should be really special. I was surprised at the quality and range of the photos.

### Astro Imaging SIG

Gordon Hansen

The October meeting was held at HFCC

All are invited to join us in the Astro Imaging SIG meetings, to share and discuss images, experiences, and techniques.

We always have a good time, with lively discussion, and sharing of valuable information.

Next meeting is in December 9. The meeting room location – HFCC Admin. Services and Conference Center (same building), Berry Amphitheater Auditorium.

Topics invited. Pizza served.

### FAAC Events 2010

Kevin Medon and Lori Poremsky

Dec 2 - General Meeting, HFCC Campus.

Dec 9 - Astrophotography SIG, HFCC Campus

January 6 - FAAC Board Meeting, Senate Coney Island Dearborn MI

**January 13 Astrophotography SIG** 

January 15 - Lake Erie Metropark Ice Daze

January 27 - General Meeting HFCC Campus

Background Photo from Lunt Solar Scope Image taken at the Hector J Robinson Observatory, June 28, 2010

### One FAAC members blog

http://hjrobservatory.blogspot.com/

A few updates on the observatory, quick articles and photos. I'll try to improve my writing on this blog. Also, I try to keep daily updates on this blog.

### **Items For Sale**

Meade Lightbridge Deluxe 12" – F/5, 1524mm focal length. Purchased new last year. Perfect condition mechanically, optically and cosmetically. Big, clear deep sky views. Built-in battery powered cooling fan, two-speed Crayford focuser (1.25 / 2-inch). Easy to transport, set up collimate and use - smooth as silk. Upgraded with Bob's knobs and heavier collimation springs. Includes shroud, cover, Telrad and secondary mirror heater. Over \$1000 invested, will sell for \$650.

Contact John Johnson at jjohnsonpub@yahoo.com

or (248) 515-0014.

MEADE Telescope and Tripod 6 years old - in excellent shape LXD 75 - Series Schmidt - Cassegrain 8" f/10 SC-8AT (Super Coated, Autostar Guided) - Focal Length 2000 mm Telescope weight = 24 lbs - with MEADE EMC Super Multi-Coatings and with optional Ultra-High Transmission Coating Tripod weight = 45 lbs - Die cast Aluminum German-Type Equatorial Mount with Variable-Height Field Adjustments Autostar Controller guides to 30,223 objects

Includes a Sun Filter, Overnight Protective Cover, Transportation Containers. Contact phone no. 248-851-5053, e-mail

robertboswell@comcast.net

Two Scopes For Sale

**Celestron 6"** Schmidt Cassegrain w XLT Like new condition. With diagonal and finder.

Tote bag. \$325 Retail \$699

**Meade Lightbridge 10"** With std accessories. Used one time, includes transport boxes. Going for \$475 Retail \$599 + Ship + Tax Need to raise cash for toys.

Tom Blaszak key string quy@yahoo.com

### **FAAC Sirus Award**

by Doug Baur

Two years ago, FAAC initiated the annual Sirius Award. Every year FAAC presents one member with the Sirius Award plaque. It is presented to the Brightest Star in the Ford Amateur Astronomy Club at the annual FAAC Banquet. Past winners include: Bob FitzGerald and Dr. Timothy Dey.

I am accepting nominations for the award for the 2011 Banquet.

If you have a FAAC member who you think has distinguished themselves in their efforts in FAAC over the time of their membership (it doesn't have to just be in 2009), please send me a note with the member's name and the reasons that you believe they should be honored.

At the end of 2010, the FAAC Board will review the nominations and select one person to be honored at the Banquet.

Nominations will be known only to the Board Members and the submitter. Only the winner will be announced to the membership. Current Board Members are not eligible to be nominated.

Please submit your nominees to me (DougBauer@Comcast. Net) or Phone me at: (586)915-8459.

Thanks,

Doug Bauer

### Hector J Robinson Observatory Report

by Greg Knekleian

This past month has been very cloudy. We've had fewer viewing opportunities with the cold weather putting a damper on some of the star gazing enthusiasm at HJRO as well.

Of course, we get better views with the cold crisp air of any clear winter night. Less atmospheric heat and thermal problems. I'm buying an infrared heater that heats our bodies inside the HJRO. Greg Ozimek owns one and Greg picked one up for me on his trip to COSCO. We tested his last year for some of the HJRO observing sessions. It may reduce a bit of clarity for viewing, but it's nice to turn these on near the end of a session to warm up a bit. These work much better than normal electric convection air heaters.

There should be a meeting with the superintendent soon, George Korody, Tim Dey and I will meet with him. We'll provide a letter of understanding regarding FAACs participation at the observatory. (As I'm writing this, Sunday Nov 28, the sky is clear and it's cold outside, I'm picking up the heater tonight from Greg Ozimek and may be out at the observatory at 10PM, finally some observing.)

George Korody is working on a HJRO handout flyer to be placed in libraries.

I was going over some photos I've taken and moved many of those photos off my laptop to an external USB drive. Unfortunately, I had an accident and dropped the portable USB drive. This caused hard drive damage. I may have lost a couple of months worth of HJRO Canon photos. I have to review SIM memory cards. USB external drives are inexpensive and very fragile, best to have a backup copy, data recovery can be costly.

This month, I've assembled a montage photo from some of my 2010 surviving photos at the HJRO on page 9. I'm going to print that single photo page in color for the mailed issues. My little holiday gift to the readers. Happy Holidays.

# IT'S TIME TO RENEW YOUR FAAC MEMBERSHIP!



Renewing your membership will allow you to continue to enjoy the benefits that FAAC brings to you:

- Access to the observing sites at
  - Island Lake Recreation Area
  - Lake Erie Metro Park
  - Richmond Airport
- Discounted subscriptions to Sky & Telescope and Astronomy magazines

**AND** most importantly the interaction with people who share your love for amateur astronomy!

Membership fees for 2011 are the same as 2010:

- \$25 for renewal if paid **before** January 31, 2011
- After January 31, 2011 late renewal is \$30

Please mail your renewal check (or see me or any officer at a club meeting) to:

Ford Amateur Astronomy Club P.O. Box 7527 Dearborn, Michigan 48121-7527

Have you moved, new phone number, or changed your email address? Please include any updates with your renewal.

Thank you, Gordon Hansen Treasurer



Ford Amateur Astronomy Club Star Stuff Newsletter P.O. Box 7527 Dearborn MI 48121-7527



#### NOTES REGARDING PHOTO MONTAGE (on page 9) - photos by Greg Knekleian

Most of the photos were taken with a Canon EOS T1i. The photo of the live view of the Canon T1i was shot with an Apple Iphone and a Sony HD cam took the image of the observatory reflection in the F150 truck hubcap. None of the photos had extensive photo processing or stacking. They are basic beginner photos taken on an setup that the FAAC Core group setup. True Astro-photographs of higher quality will be appearing as we spend more time and use filters and most extensive stacking and post processing techniques.

Images are as follows:

Top Left: HA Solar scope image handheld Canon T1i using Barlow and Lunt Solar Scope. Some color adjustments to give it an orange tint. This is the "plasma puffs" event shown on the June 29th 2010 NASA sun 3d site, from our perspective.

Ganymede shadow transit of Jupiter handheld photo through 25mm TV Plossl eyepiece - one shot 3x zoom Canon t1i, no stacking or post processing (which would have improved the image).

Reflection of observatory off (my) Inexpensive f.4.2 Bushnell Telescope temporarily sitting on shelf.

Live View of moon through Canon T1i t-mounted on C-14.

Bottom Left: Live Solar image on monitor through StellaCam mounted on the Lunt Solar Scope.

Inset left lower middle: Moon live on Observatory on (my) TV monitor through the observatory's Stellacam.

Lower inset: Low Light exposure of Tim Dey looking through the C-14. Glow from red light and blue LED light off wifi antenna.

Lower Right: Observatory Low light exposure at night with visiting telescopes. Photo taken from Football stadium stands.

Center Right: C14 in observatory, with other telescopes mounted on it's OTA.

Top Right: Reflection of observatory off F150 Nascar Rim (Sony HD Cam)