

*** CAS ***

Charlottesville Astronomical Society Monthly Meeting



December 2, 2015



WELCOME!

NEW MEMBERS AND GUESTS

Allan Mayer family

Agenda

- **Welcome**
- **Guest Speaker**
- **Special Election – CAS Vice-President**
- **2016 CAS Mission, Functional Tasks, & Organization**
- **2016 CAS Club Business**
- **2016 CAS Focus**
- **Comments and Questions**
- **Door Prize Drawing**
- **Closing Thought**



Guest Speaker Dr. Shanil Virani PhD

Director, John C. Wells Planetarium and Associate Professor,
Department of Physics & Astronomy at James Madison
University, Harrisonburg, VA



- **Education**

- Yale University, Phd, Astronomy, 2004 – 2010
- Yale University, M.Phil., Astronomy, 2004 – 2006
- Yale University, M.S., Astronomy, 2004 – 2005
- University of Waterloo, B.Sc., Honors Physics with specialization in Astrophysics and a minor in Mathematics, 1992 – 1996
- University of Waterloo, B.A., Philosophy, 1992 – 1996

- **Other Accomplishments**

- Graduate work at Yale University studying supermassive black holes, both distant and near, that we now know lurk in the centers of virtually all galaxies, including our own!
- Five years as a member of the Chandra X-ray Observatory science team, NASA's flagship X-ray mission managed and operated by the Harvard-Smithsonian Center for Astrophysics in Cambridge, MA.

Special Election CAS Vice-President

Nominee: Rich Drumm



December 2015 CAS Monthly Meeting

2016 CAS Mission, Functional Tasks, & Organization



Mission

Charlottesville Astronomical Society

“Promoting the Enjoyment of Observing and Learning for All!”

*“all” includes **CAS Members**, as well as the general public, students,
and patrons of public institutions (libraries, etc.)*

Mission Accomplishment Demands CAS Member Active Support!



CAS Functional Tasks

- Administrative (Jan-Dec)
 - Administration
 - Calendar
 - Monthly Meeting Presentations; Speakers; Door Prizes
 - Meeting Notes
 - Club Equipment
 - Library Administration
 - Website Administration
 - Liaison (UVA, Ivy Creek, VAAS, Astronomical League, etc.)
 - Magazine Subscriptions
 - Financial Administration
- Member (Jan-Dec)
 - Observing
 - Mentoring, Education, and Workshops
 - Astronomical League Observing Awards Program
 - Operator Certification
 - Field Trips
 - Club Telescopes for Member Use
 - Social Events
 - Monthly Meetings
 - Family Day Monthly Meeting Sunday, June 5, 2016
 - Discounts: Magazine Subscriptions
- Outreach
 - Astro-OP: Newsletter; *Presentations/Speakers Bureau; School Club Support (Sept-Jun)*
 - Camp Fantastic (Aug)
 - CAS Exhibit-Information-Literature Table (Jan – Dec)
 - CAS Refreshment Stand (Apr, Oct)
 - Dark Skies, Bright Kids (Mar)
 - Heidi's Night (5th Fridays)
 - Hollymead School (Fall, Spring)
 - Ivy Creek Natural Area Public Night (1st Fridays)
 - JMRL-Northside Monthly Sat. Mornings (Oct-Jan)
 - KidVention Discovery Museum (Feb)
 - Market at Grelen (May-Oct)
 - Shenandoah National Park (Jan – Dec)
 - UVA/CAS LMO Group Nights (Jan-Dec)
 - UVA Fan Mt. Public Night Support (Apr, Oct)
 - Virginia Piedmont Regional Science Fair (Mar)
 - Plus ????



CAS 2016 Organization

- **Officers (elected and appointed)**
 - Fritz Repich, President
 - Rich Drumm, Vice-President, (*advocate for CAS Member Observing activities*)
 - Larry Saunders, Secretary
 - Michael Hegedus, Treasurer
 - *Steve Layman, Director, Outreach (*advocate for CAS Outreach activities, events, and programs*)
 - *Ed Preston, Custodian, Club Equipment
 - *Open, Director, Member Mentoring and Training (*advocate for CAS Member mentoring and training*)
- **Executive Council**
 - 4 elected officers and from one to six, at-large, appointed members

* *Appointed Office*



President's *Duties and Responsibilities*

- **Executive Council Meetings** – *Preside, Schedule, Plan*
- **Monthly Meetings** – *Preside, Schedule, Plan*
- **Monthly Speakers** - *Plan, Recruit and Coordinate*
- **Door Prizes** - *Acquire*
- **Calendar: Member Activities & Outreach Events** – *Plan, Coordinate, Control*
- **Outreach E-News** - *Publish and Distribute*
- **Heidi Winters' Annual Award** – *Schedule, Plan, Coordinate*
- **Member Field Trips** – *Plan & Coordinate*
- **Astronomical Activity/Event/Social Program** – *Plan, Coordinate*
- **Activity/Event Refreshment Stand** – *Schedule, Plan, Coordinate*
- **Astronomy Exhibit/Info/Literature Table** - *Schedule, Plan, Coordinate*
- **Public/Media Relations** – *Plan, Coordinate*
- **Virginia Piedmont Regional Science Fair** – *Plan, Coordinate*
- **Liaison** (UVA Astronomy, Ivy Creek, VAAS, Astro League, etc.) - *Plan, Coordinate*

Note: *I am seeking volunteers to perform the tasks that are highlighted in Yellow*



Vice-President *Duties and Responsibilities*

- **Member Activity Program** – *Initiate & Manage*
 - **Member Observing Events, Star Parties, Retreats, etc.** – *Plan & Coordinate*
- **Member Certification Program** - *Plan & Coordinate*
 - **Observation Astronomical League Certification** – *Coordinate & Control*
 - **Equipment Instruction & Certification** – *Coordinate & Control*
 - **Astronomical League Outreach Certification will be coordinated and controlled by the Director, Outreach**



Secretary's *Duties and Responsibilities*

- **Website** - *Manage & Maintain*
- **Member Email List** – *Administer & Maintain*
- **Monthly Meeting Notes** - *Record & Publish*
- **Exec Council Meeting Notes** – *Record & Publish*



Treasurer

Duties and Responsibilities

- **Financial Reports** - *Manage & Prepare*
- **Payables** – *Control & Disburse*
- **Receivables (Club Dues)** – *Collect & Manage*
- **Magazine Subscription Discounts** - *Manage*



Custodian, Club Equipment *Duties and Responsibilities*

- **Existing Club Equipment** - *Inventory, Check-in/Check-out, Test, Calibrate, Maintain, Store, & Record*
- **New Equipment** - *Research, Recommend, and Acquire*
- **Obsolete, Old, Junk Equipment** – *Sell or Dispose*
- **Reporting** - *Semi-annual reports to CAS membership of equipment inventory, utilization, and status, donations acquired, and recommended acquisitions, replacements, or disposals*



Director, Outreach

Duties and Responsibilities

- **Group/Public Outreach** - *Plan & Coordinate*
 - **CAS Events** - *Plan & Coordinate*
 - **UVA Events** - *Support*
- **Astronomical League Outreach Certification** – *Coordinate and Control*
- **Educational Institution Outreach (LGMS, JMRL, etc.)** - *Plan & Coordinate*
- **Public/Private School Outreach (Students, Astronomy Clubs)** - *Plan & Coordinate*
- **Outreach Speakers Bureau** - *Plan, & Coordinate*
- **Public Education Program** - *Plan, Coordinate, & Administer*
- **Library** – *Administer & Maintain*

Note: I am seeking volunteers to perform the tasks that are highlighted in Yellow



Director, Mentoring and Training (**Open**)

Duties and Responsibilities

- **New / Novice Members and Mentors** – *Assign and coordinate formal classroom education or hands-on field training conducted by volunteer CAS members*
- **Volunteer Mentors:**
 - *Steve Layman*
 - *Wes Epperly*
 - *Bill Phillips – “Bill is known to make House Calls”*
 - *Allan Mayer*

Note: The formal classroom lectures and the hands-on mentoring includes topics such as: “How to Setup and Operate Your Telescope” and “How to Navigate the Night Sky” along with practical observing hints and tips.

Note: I am seeking volunteers to perform the tasks that are highlighted in Yellow



December 2015 CAS Monthly Meeting

CAS Club Business



Club Business

Financial and Membership Status

- **CAS Checking Account Balance :** **\$4225.44**
- **Uncleared Checks :** **none**
- **Net Balance :** **\$4225.44**
- **Petty Cash :** **\$105.00**
- **Total CAS cash assets :** **\$4,330.44**
- **New members:**
 - *Allan Mayer family (Member of NoVAC, interested in outreach)*
- **CAS memberships stand at:**
 - **Individual** **32**
 - **Family** **12**
 - **Senior** **34**
 - **Student/military** **2**
 - **Educators** **6**
 - **Total** **86**
 - **Adjusted Total** **98** *(includes one additional person for each family membership)*

Respectfully submitted on November 30, 2015 by Michael Hegedus, CAS Treasurer



Club Business

Dues are Due on/before January 1, 2016

CAS Annual Membership Fees

- \$25 Individual
- \$30 Family
- \$15 Senior (65 & Over)
- \$15 Student (up to age 22, enrolled in a school, college, or university)
- \$15 Active Duty Military
- \$15 Educators
- \$ 0 Science Educators (Free)
- *Membership includes access to private and restricted observing sites, membership in the Astronomical League, and membership in the International Dark Sky Association*
- *Contact or email Michael Hegedus, CAS Treasurer ngc6705@comcast.net*





Club Business

2016 Heidi Winter Award Recipient

Steve Layman



- Currently the CAS Director, Outreach, Steve Layman, a native of Toledo, Ohio, has served five terms as President and one as Vice-President of the Charlottesville Astronomical Society
- Steve now manages the CLUSTER (Chandra Loans UVA's Telescopes to Educators) Telescope Loaner Program and helped prepare the current McCormick Observatory Museum display on the Cassini and Saturn
- Co-teaches the Albemarle County Open Doors Astronomy Class with Larry Saunders
- Certification Awards from the Astronomical League for Basic and Stellar Outreach and the Binocular Messier
- Certificates of Accomplishment from the University of Edinburg for AstroTech: The Science and Technology Behind Astronomical Discovery and Astrobiology and the Search for Extraterrestrial Life; and from the University of Tokyo for From the Big Bang to Dark Energy.
- In 2007, Steve became the seventh director of the Charlottesville Municipal Band, an 80 member volunteer organization that performs more than 40 full band and small ensemble performances in Central Virginia each year. He also manages the bands Municipal Arts Center – a 1.4 million dollar resource for non-profit and arts groups in the area. Steve is also a Nationally Registered Music Educator
- University of Kentucky, Masters in Music, Ohio Northern University undergraduate degree in Music Education
- Recipient of the John Philip Sousa Citation; 1996 Recipient of the Piedmont Council for the Arts Education Award
- Recipient of two President's Citations from the Virginia Governor's School
- Member of Kappa Kappa Psi Band Fraternity and a Phi Kappa Lambda Music Honorary
- Mr. Layman directed the University of Virginia Symphonic Band and Brass Ensembles between 1984 and 1990, and is currently a member of the adjunct music faculty at Piedmont Virginia Community College.



Club Business

2016 Monthly Meeting Schedule

- **Jan 6, 2016, LMO** – John Goss, President, Astronomical League
- **Feb 3, 2016, NRAO Hdqrts.** – Steve Layman, 2016 Heidi Winter Award Recipient
- **Mar 2, 2016, LMO** – Speaker TBD
- **Apr 6, 2016, LMO** – Speaker TBD
- **May 4, 2016, LMO** – Speaker TBD
- **Jun 5, 2016, JMU** – CAS Family Day, Sunday - 2 PM, JMU's Planetarium
- **Jul 6, 2016, LMO** – Speaker TBD
- **Aug 3, 2016, LMO** – Speaker TBD
- **Sep 7, 2016, LMO** – Speaker TBD
- **Oct 5, 2016, LMO** – Speaker TBD
- **Nov 2, 2016, LMO** – Speaker TBD
- **Dec 7, 2016, LMO** – Speaker TBD



Club Business Project Status

- **CAS Library – Steve Layman, Librarian.**
 - Book and CD/VHS Listing – Updated Monthly
 - Do you have books or videos to contribute?
- **UVA McCormick Museum Project**
 - Student Volunteers
 - Parallax Equipment and Plates Displays
 - McCormick History
 - Contracting with a Museum Display Firm for Completion



Club Business

Upcoming Events

– Club Event

- **Christmas Party Potluck** at Steve and Alice Layman's Home
 - When: **Friday 7 – 9 PM, December 11, 2015**
 - Where: **Steve and Alice Layman's Home:**
 - **2528 Brandermill Place, Brandywine Road, Charlottesville, VA 22911**
 - RSVP to Steve, slayman2528@comcast.net by December 7, 2015 via email
 - **Steve and Alice will supply soda, wassail, and some Christmas cookies**
 - **Bring a covered dish to share**

– Observing and Outreach Events

- **December 5, 2015** and **January 9, 2016** at JMRL-Northside, 10 AM – 1 PM: Saturday morning astronomy presentation, literature/information table and solar/lunar observing (weather permitting)
- **February 20, 2016**, Kid-Vention, Discovery Museum, Charlottesville 10 AM – 3 PM: Solar observation (weather permitting) and literature/information table

– Additions??



December 2015 CAS Monthly Meeting

CAS Focus for 2016



CAS Focus for 2016

Increased Member Activities and Events!

- **Observing**
 - Local Observing: Star Party-Dark Sky Sites (Residential, Private, Public, and/or Restricted)
 - Retreat Observing: Fan Mt, Market at Grelen, Bear Mt., Staunton River State Park, and El Rito, NM Lodge-Observatory)
 - **Mentoring, Education, Training, and Workshops**
 - **Astronomical League Observing and Outreach Awards Program**
 - **Operator Certifications** (26" LMO Clarke, 10" LMO Doghouse Meade)
 - **Field Trips** (2-4/Year)
 - **Club Telescope Use**
 - **Social Events**
 - Christmas Party - December 11th
 - JMU Planetarium Family Day - June 5, 2016
 - Family Picnic-Star Party July/August 2016???
 - **Monthly Meetings** - JMU Planetarium Family Day Monthly Meeting Sunday, June 5, 2016
 - **Discounts:** Magazine Subscriptions
- 
- A stylized silhouette of a mountain range in shades of brown and tan, positioned at the bottom of the slide against a blue gradient background.

CAS Focus for 2016

Member-Only Observing Sites

- **Local Observing: Dark-Sky Star-Party Sites**
 - **Member Residential Sites**
 - Rich Drumm's Farm: *Lombardi Observatory*
 - Susan Bender's Farm: *Need to check with Susan re: availability*
 - Other - *tbd*
 - **Private Sites**
 - Market at Grelen – *Scott Duresky will coordinate*
 - Bear Mountain - *Scott Duresky will coordinate*
 - **Public Sites**
 - Skyline Drive, Shenendoah National Park
 - Staunton River State Park (IDA Designated Dark-Sky Site) – *Karl Stein will coordinate*
 - Hollymead School -
 - Ivy Creek Natural Area
 - **Restricted Sites**
 - Leander McCormick Observatory
 - Fan Mountain Observatory
- **Retreat Observing: Dark-Sky Member-Only, Star-Party Sites**
 - Fan Mountain
 - Staunton River State Park (IDA Designated Dark-Sky Site) – *Karl Stein will coordinate*
 - Market at Grelen – *Scott Duresky will coordinate*
 - Bear Mountain – *Scott Duresky will coordinate*
 - El Rito, New Mexico Lodge-Observatory – *Fritz will coordinate*

CAS Focus for 2016

Lodge with Observatory El Rito, New Mexico

- <https://www.airbnb.com/rooms/7697447?s=wtB->
- [Accommodates: 6](#)
- Bedrooms: 3
- Bathrooms: 2
- Beds: 6
- Check In: 3:00 PM
- Check Out: 12:00 PM (noon)
- [Property type: House with Observatory](#)
- Room type: Entire home/apt

- **Basic Rate Schedule:**
- \$114 / Night (for first two guests)
- Extra people: \$20 / Night after 2 guests
- Cleaning Fee: \$80
- Weekly discount: 10%
- [Monthly discount:](#) 13%
- Cancellation: [Flexible](#)



CAS Focus for 2016

Estimated Cost/Member, Six Members

7-Night El Rito, NM Retreat (*includes R/T Air from Richmond, VA - Sante Fe, NM*)

- **Option 1. Est. Member Cost \$1,013**

7 Nights @ \$114 = \$798

Extra People: 4 @ \$20/night = \$560

Cleaning Fee: \$80

Food: 6 people @ \$20/day x 7 Days = \$840

GMC Van Rental, Sante Fe, NM (est) = \$900

Total = \$3,178

Total Cost Per Person (\$3,178/6) = \$530

RT Air, Per Person (Richmond-Sante Fe, NM) = \$500

Total Per Member Cost = \$1,030

Notes:

1. Option 2 includes an additional \$117 per member to have personal equipment transported to NM

2. Options 1 and 2: Weekly discount not calculated

- **Option 2. Est. Member Cost \$1,180**

7 Nights @ \$114 = \$798

Extra People: 4 @ \$20/night = \$560

Cleaning Fee: \$80

Food: 6 people @ \$20/day x 7 Days = \$840

Dodge Minivan Rental, fuel costs, and lodging = \$1,800

Total = \$4,078

Total Cost Per Person (\$4,078/6) = \$680

RT Air, Per Person (Richmond-Sante Fe, NM) = \$500

Total Per Member Cost = \$1,180

Notes: (continued)

3. Rent van at CHO to transport member scopes /equipment; drive to NM, (2,000-miles, 26 Hrs, one-way) total estimated cost (Dodge Minivan rental \$800, estimated fuel costs \$400, and 6-nights driver lodging \$600) are: \$1,800

CAS Focus for 2016

El Rito, NM Lodge-Observatory Detailed Information

- **Description:** The Big Sky Lodge is a peaceful retreat from the noise and stress of everyday life. You can get away from it all without being too far away - we've got wifi, cable and reliable phone service. Sit by the clear mountain streams burbling in the front yard, walk among the Pinon, juniper and sagebrush. Nestled between El Rito Creek and the Carson National forest, close to Georgia O'Keefe's Ghost Ranch, this country retreat has a working observatory and 6 wild acres of fresh air and open space, let the bright blue skies, and starry nights soothe your overloaded senses.
- **Location:** We are at 170 NM-110, El Rito, New Mexico 87530; The right-of-way to the house has a sharp turn limiting trailers to 20' in length.
- **Accommodates:** 6; **Bathrooms:** 2; **Bedrooms:** 3; **Beds:** 6
- **Check In:** 3:00 PM; **Check Out:** 12:00 PM (noon)
- **Property type:** House; **Room type:** Entire home/apt
- **Amenities:** Kitchen, Internet, TV, Essentials
- **Safety Features:** Smoke Detector, Carbon Monoxide Detector, First Aid Kit, Fire Extinguisher
- **Prices:** \$114/Night; **Weekly discount:** 10%; **Monthly discount:** 13%
- **Extra people:** \$20 / night after 2 guests, **Cleaning Fee:** \$80;
- **Minimum stay:** Two nights, **Cancellation:** Flexible
- **The Neighborhood:**
- **Carson National Forest** - (right in our backyard) Many acres of barely-explored trails and spectacular rock climbing spots. **El Faralito Restaurant** - (website hidden) called El Faralito a folksy eatery. They recommend the green chili stew and the "excellent Fritos pie". I always go for their chicken enchilada/chili relleno combo with green and red chile (Christmas). **Plaza Blanca Ranch** - These spectacular white-rock badlands were painted by Georgia O'Keefe. Plaza Blanca was also the location of the alien ship in "Cowboys and Aliens". **Ghost Ranch Education and Retreat center** – Georgia O'Keefe painted a lot here. You can camp out, meditate, yoga, paint or take classes. **Bode's General Store** - Groceries and camping supplies, lunches are also served. Recommended: the green chile burgers. **Ojo Caliente Mineral Baths and Spa** - A wonderful place to spa, relax and eat.
- **Interaction with Guests:** We offer the entire house for rent, so we won't be in the immediate area during your stay, but we will be there to greet guests and show them the ropes. Phone numbers/contact info given upon check-in
- **Guest Access:** Guests can go anywhere in the house they please. We have our stuff in the stables/storage area, but otherwise, the grounds are also free for wandering. Nature also runs free here - deer, raccoons, bunnies and the occasional black bear stop by to nibble on the many edible plants in our backyard. There's cholla, prickly pear, yucca, and piñon. The creek that runs along the front yard also provides a haven for the local wildlife.
- **Observatory is also available.** There is a pier-mounted Celestron CGEM 1100 with a Canon-camera mount, a Telrad, a finder scope, a focuser from shoestring astronomy, a motorfocus, a Celestron off-axis guider with various adapters, an SBIG st-i as an autoguider, a selection of 2 inch eye pieces (40, 32, 26 and 18mm) and filters (including variable-polarizing and narrowband o-iii filters). It is powered by a 12-volt portable battery which is kept charged in the dining room of the house. There is also a free-standing Meade LX50. I have solar filters for both as well as a Canon T-adaptor. One challenge may be moving the roof of the observatory, which is currently not automated. (I am working on it.)
- **Getting Around:** The RTD Blue Bus provides service to El Rito (schedules available online) but is best accessed by car or truck.

CAS Focus for 2016

Club Scopes

- Club Scopes available for use by members <http://cvilleastro.com/club-telescopes-available-for-club-member-use/>
- *See Ed Preston for information*



CAS Focus for 2016

Astronomical League Awards

- Have you participated in any of the following?
- Spring or Fall Fan Mountain Public night
- Hollymead Elementary School Star Party
- Ivy Creek Natural Area Public Nights
- The Market at Grelen Star Party
- Open Doors session
- McCormick Group Nights, *etc.*

If so.....you may be eligible for an Outreach Award



CAS Focus for 2016

Astronomical League Awards (*continued*)

- The Astronomical League Outreach Award Requirements:
 - Five 2-hour outreach sessions
 - Document using an AL spreadsheet
 - Confirm with club officer



CAS Focus for 2016

Increase Membership and Membership Diversity

- **I need Your Support to Increase the:**
 - ***Number of CAS Members***
 - ***Diversity of CAS Membership*** (especially minorities [black, hispanic, Asian, others, etc.], as well as females, students, young adults, families, and seniors)
- **How?**
 - ***Solicit your family, friends, and neighbors to become CAS Members***
 - ***Conduct CAS Membership Drives at Outreach Activities and Events***

Comments and Questions?



Door Prize Drawing

Wow, all this astronomy and I get to win a door prize too. Only in America, What a Country!



Closing Thought

- ***“When you reach the end of your rope, tie a knot in it and hang on.” - Franklin Delano Roosevelt***

read more at:

<http://www.brainyquote.com/quotes/quotes/f/franklind101840.html#x3YwbOrFTz2yMMmv.99>

