

Smoky Mountain Astronomical Society

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S.C.R.A.P.S.

Society's **Ch**Ronological **A**stronomical **P**aper**S**



February 11th SMAS MEETING

PSTCC, Main Campus, Hardin Valley Road

Alexander Bldg, Room 223

Time: 7 PM

SMAS Elections To Be Held



The Wiz

Dear Wiz,

What's the best thing in the night sky?

Wondering...

Dear Wondering,

That could be the finest question I've ever been asked. But you must realize that it is a personal question.

Sometimes, late at night on the Cherochala, when I have been watching the vault of the Milky Way slowly turn over my head, I feel an intrinsic link with it, because I know that its turning is my turning. We dance with each other.

All of us understand how we trace the origin of our very atoms to the stars. We know how our daily lives are dependent on the energy from the sun. We know our moon's effect on our tides. We know how the vagaries of comets and meteors could affect life on earth catastrophically in a twinkling.

So the realization that we are part of them, and they are part of us, which seldom comes during the busy workaday, subtly grows when we turn our attention to them, and become immersed in their observation. Could that be the best part of the night sky?

I held six year old Judah Shepard in my arms to keep him from falling off my chair, the first time he ever looked through my telescope. He saw Albireo, and said, "WOW, IT'S BEAUTIFUL." For him, it was the best thing in the sky.

For me, the best thing I saw was his wonderment. It was the wonderment of humankind with the night sky. It's the best thing I've ever seen in the night sky.

What You Missed at the Last Meeting—Angela Quick

SMAS Meeting

Friday, January 14, 2005

Main Campus, Pellissippi State Technical Community College

The meeting began at 7:05 pm, with 15 members and six guests present.

Mike Littleton and Erik Iverson distributed a paper survey to those present. The survey

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measures members' interests in 24 different activities SMAS might pursue. The survey will also be distributed via email and snail mail to members not present at the January meeting.

Lee Erickson introduced the evening's speaker, Dr. Christian Cardall. Dr. Cardall spoke about the different types of supernovae, the role they play in creating the elements, and how they can be used to measure and describe our universe. He did an excellent job fielding questions from a curious and vocal audience, and shaping his answers so that all could understand. This time, we managed to cover all the material our speaker had prepared in an hour and fifteen minutes!

The meeting ended with nomination of officers for the February 11 election. Here is who has been nominated so far:

President: Mike Littleton

Vice President: Erik Iverson

Secretary: Lee Erickson

There are no nominations for Treasurer at this time.

The meeting ended with general conversation, with the final members drifting home around 9:15.

A Quandary—Bob Arr

Last spring, Bill Burgess kindly donated one of his new 5" refractors to SMAS. In addition, he promised to donate an equatorial mount and tripod when they became available, but they are not yet available. And since we don't have them, the refractor languishes.



Master astronomer Noah Kidding demonstrates some useful techniques for observing with our mount-less Burgess 1278 refractor.

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What to do? A premium 5" refractor is a marvelous telescope, but we have only used it once, on a borrowed mount. It has its own dewshield, 90° diagonal, rings and dovetail base (which fits a standard Vixen adapter), plus an 8 x 50 finderscope. It weighs 15 pounds, which means it would need at least a medium-to-heavy-duty tripod. Some considerations are:

1. We already have a couple dobs available as loaners, but they have gotten virtually no use in the past year. Why not? Because a novice without a telescope has not joined. (They already had their own.) So the obvious question is, if we aren't using what we've got, why do we need more?
2. Dobs are fine, but they don't give the novice any experience with other kinds of telescopes. Mentoring is great, but many of us believe that one doesn't really start learning until one gets out on ones own, and begins to struggle with the problems. A couple star parties, coupled with a thorough equipment checkout, should get the average bear his solo flight.
3. We never know when a true novice, sans equipment, will join. Providing him or her with observing experience and basic instruction on the use of two or three kinds of telescopes can lead the way to a lifetime of interest. Hey, what's a club for?
4. The club has virtually no discretionary funds.

But a good 5" refractor is worthy of a sturdy tripod and (at least) an equatorial mount. As a trainer for a novice, it would be superb. It even opens the door for learning ccd imaging for anyone in the club.

Perhaps there's the possibility that a member may have an unused mount and tripod that s/he would be willing to lend us temporarily. We'd like to discuss ideas about how to obtain a mount and tripod for this fine instrument at the next meeting.

A 1x Ocular Upgrade—Ron Dinkins

The following description chronicles my experience with the new Custom-Vue Lasik surgery I had in November 2003. After one year, I can say it has been a very pleasant experience.

I was somewhat apprehensive at first because of my astronomy hobby. Not to plug doctors, but I used Campbell and Cunningham in Knoxville because of the many procedures they've performed. I explained to Dr. Campbell that I was an astronomer and was very picky with my eyes. He suggested the new Custom-Vue procedure. The Custom-Vue procedure involves a more thorough exam than the regular Lasik. A computer is used to map the optical path from the retina through the lens of the eye to show any imperfections inside. This

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allows the Lasik machine to correct mapped sections and allow closer matching to perfect vision. The same machine is used for regular Lasik and Custom-Vue Lasik, but I agreed that the extra steps were well worth it.

The eye examination takes about an hour and involves a couple of extra steps: computer mapping, internal pressure, and peripheral vision. If you wear soft or hard contacts, you will be given an exam time-based on how long you have to go without wearing them. I had to go 24 hours without wearing my glasses for my eyes to relax.

After the exam, you are evaluated for suitability for the procedure. Most people can have Lasik, however some conditions, such as glaucoma, may make for some poor candidates. I qualified for the Custom-Vue, so I setup an appointment. The paper work involves signing waivers accepting the possibility of blindness or vision that was not improved. That always cranks up the old gastric juices.

The procedure itself was nearly painless. You take a Valium in the waiting room 30 minutes before, so you feel quite relaxed in the chair. A surgical lens-flap cutting device is placed over one eye. It applies fairly strong pressure to the bones surrounding the eye socket, but is not really painful. Dr. Campbell then cut a flap of skin off the surface of the eye lens and laid it back to expose the lens. The Lasik machine is then positioned over the lens to begin laser pulse cutting of the lens itself. I know what your thinking, "But what if I move!" The Lasik machine constantly monitors the eye position and automatically shuts down if the eye moves too much. You just see blurry red crosshairs that you stare at for about 30 seconds. The flap is repositioned over the lens and glued down. It's all over in about 5 minutes start to finish, for each eye. You have to have someone drive you home, where afterwards you sleep off the Valium.

That evening you begin using a couple different prescription eye drops for the next month, mainly to promote healing and prevent infections. The difference is immediate! I was lying in bed watching T.V. with no glasses. I've worn glasses for 29 years, since I was 11 years old.

The next morning I drove myself back to the office for a follow-up appointment to check the flap placements. I was examined and had 20/15 vision in my left eye and 20/20 in my right eye. I was quite pleased.

The entire healing process takes two months with several exams in between. If the result is not as expected, touch-ups can be made without undergoing the entire procedure again. The flap is just re-lifted to expose the lens again. Touch-ups are a lot more rare when using the Custom-Vue procedure. I did not require any.

After one year, I still have the same 20/15 left and 20/20 right results. My observing habits have changed for the better. I no longer have to wear my glasses to look up at the sky, and then take them off at the eyepiece. I use my higher power eyepieces more often now, since eye relief was usually shorter and I avoided switching to them because of the glasses. Overall, I'm glad I did it.

The other persuading factor for me was: my new house has a swimming pool. My children are 5 and 10 years old, so I like to be able to see them in the pool without wearing glasses.

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Okay, now I saved the best for last. How much does it cost? Prices change all the time and surprisingly in the cheaper direction, as more procedures are done. At the time I had the Custom-Vue Lasik done, it was just under \$2,000 per eye. This included the qualifying exams, procedure, one year of follow up exams, and one touch-up if required. Several payment plan options are available through the office.

Yes, I did have to take my wife with me to the office to see the video of how it works, before she was convinced. Since then she has agreed it was worth it, too. I would recommend it to anyone who spends time outdoors on a regular basis and wants freedom from glasses. My 1X ocular upgrade was a complete success. Anyone who wants to quiz me more about it, can just drop me an email at rldinkins@yahoo.com.

**TENNESSEE SPRING STAR PARTY
FALL CREEK FALLS STATE PARK
FRIDAY MARCH 11TH THROUGH SUNDAY 13TH**

- SPEAKERS: DR. ROBERT KNOP, PROFESSOR OF ASTRONOMY AT VANDERBILT UNIV.
SPEAKING ON INTERACTING GALAXIES AND GALAXY EVOLUTION
- MICHAEL BENSON SPEAKING ON THE ASTRONOMICAL LEAGUE'S MESSIER CLUB
- FANTASTIC ASTRONOMY MUSIC PROVIDED BY T.J. LARKIN AND ROCKY ALVEY
- MESSIER MARATHON BOTH TELESCOPE AND BINOCULAR
- SWAP SHOP
- PARK ACTIVITIES

The first annual Tennessee Spring Star Party is being presented by the Astronomy in the Parks Society and hosted by Fall Creek Falls State Park. The purpose of TSSP is a gathering of like minded individuals to learn and share information on Astronomy. There is no cost for this event, other than food and lodging. Fall Creek Falls State Park has created a special star party package for lodging at the Inn and will offer group camping. You will find this special offer very affordable.

Fall Creek Falls State Park is among the premier parks in Tennessee with a very dark sky, 1850 ft. elevation, and 22,000 acres of prime forest, streams, and lakes. There are miles of hiking trails, a beautiful 256 foot waterfall, and many other amenities. Please call 1-800-250-8610 for reservations or more information.

TSSP is open to all who are interested in astronomy and will get started Friday evening with star viewing. A star party schedule, park map, and red light rules will be available at the lobby of the Inn. There will be special areas and leaders for both Messier Marathon participants and for general public viewing. All red light rules will apply and red cellophane will be available on the viewing field. There will be no registration, all services and activities will be on a first come first served basis. Please call 1-800-250-8610 for more information. Come and enjoy a wonderful weekend of astronomy and outdoor activities.

For more information contact Lloyd Watkins or Rocky Alvey at 615-824-3005 or watkinslk@comcast.net.

Call for Nominations for SMAS Officers

Annual SMAS election of officers is scheduled for the next meeting on February 11. There is still time to get someone's name (including your own!) on the ballot. To nominate someone for office, first obtain his or her consent. Then email the nomination to **smokymtnastro@yahoo.com** or call Angela Quick at (865) 300-2297 with your nomination. (Please leave a message if I can't answer in person.)

Currently, Mike Littleton has been nominated for President, Erik Iverson has been nominated for Vice President, and Lee Erickson has been nominated for Secretary. No one has accepted a nomination for Treasurer at this time. Lee has generously offered to serve as Treasurer instead of Secretary if someone else is willing to be Secretary.

Here is a brief description of what each officer does.

The President is expected to propose initiatives, oversee activities, and provide leadership. S/he hosts the monthly meeting. S/he directs all disbursements by the Treasurer, and is also authorized to sign club checks.

The **Vice President** is expected to act as lieutenant for the president in the implementation of initiatives and conduct of normal operations. S/he substitutes for the President in his/her absence at club meetings.

The **Secretary** makes permanent minutes of each meeting, which are used as references at subsequent meetings. The Secretary conducts the annual nomination and election of officers. The Secretary maintains the official copy of the Constitution and Bylaws. (And also a box of "archival" SMAS materials.)

The **Treasurer** maintains all the financial records of the club, is custodian of the club bank account, and presents financial statements semiannually. S/he collects annual membership dues, and determines the standing of members. S/he issues checks at the direction of the president. (Note: the Treasurer also coordinates memberships with the Astronomical League and group subscriptions with *Sky & Telescope* and *Astronomy*.)

Any hobbyist club like SMAS works best when its members are actively engaged and involved in the club's activities. If you have been enjoying SMAS, please consider helping keep the club vibrant by volunteering some of your time and effort as an officer. If none of the above jobs sound like your cup of tea, remember that appointed offices like Star Party Organizer, Astronomy Day Coordinator, Yahoo! Group manager, and Ombudsman will also be needed.

Please print off the form on page 8 and mail. Or bring along to the February 11th meeting.



Smoky Mountain Astronomical Society 2005 Ballot and Membership Renewal Form

Complete all three sections of this form and bring to the February 11th meeting
OR
mail to: SMAS, PO Box 53265, Knoxville, TN 37950

BALLOT -- Please check by name to confirm / vote for your choice:

President:

- Mike Littleton
- _____ (write-in)

Secretary:

- Lee Erickson
- _____ (write in)

Vice President:

- Erik Iverson
- _____ (write in)

Treasurer:

- _____ (write in)
- _____ (write in)

MEMBERSHIP RENEWAL -- Please confirm the following information:

Your Name: _____

Mailing Address: _____

Email Address: _____

Additional Names (if family membership): _____

I am signed up for the smokymtnastro Yahoo! Group using the email address / Yahoo! Profile below:

E-mail Address: _____ Yahoo! Profile _____

**DUES & SUBSCRIPTIONS PAYMENT – please enclose a check payable to SMAS for your total below.
(Ok, cash is fine, too.)**

- SMAS dues for 2005 -- \$20**
(Your mailing address will be supplied to the Astronomical League for your subscription to *The Reflector*.)

- | | |
|---|----------------------------------|
| <input type="checkbox"/> Sky & Telescope subscription (regular \$42.95/yr) at the club discount rate of \$32.95/yr | Current Subscriber ID #
_____ |
| <input type="checkbox"/> Astronomy subscription (regular \$42.95/yr) at the club discount rate of \$29.00/yr
<i>If a current subscriber to these magazines, please provide your ID # to ensure proper credit to your account.</i> | _____ |

TOTAL ENCLOSED: \$ _____

Ballots must be received by February 10th to be counted, although you can still vote at the February 11th meeting.

February 2005

SUN	MON	TUE	WED	THU	FRI	SAT
		1	2 Groundhog Day <i>One of the four Cross-quarter days</i>	3	4	5
6	7	8 <i>New Moon</i>	9	10	11 SMAS Meeting PSTCC Rm 223 7 pm (Elections)	12
13	14	15	16	17	18	19
20	21	22	23	24 <i>Full Moon</i>	25	26
27	28		UTK—roof of Neilson Physics Building on The Hill at UT 1st & 3rd Fridays TAO —Tamke-Allan Observatory Public Stargaze Watts Bar Lake, Roane County 1st & 3rd Saturdays			