

May 2010

Sponsored by the Santa Barbara Museum of Natural History

MAY MEETING SPEAKER

Our speaker for the May meeting is Dr. Rus Belikov whose subject is "Searching for Other Earths." Dr. Belikov received his Ph.D. from the Electrical Engineering Department at Stanford University in January of 2005. His dissertation topic at Stanford was *Diffraction-based optical filtering: Theory and implementation with MEMS*. He is currently an astrophysicist at the NASA Ames Research Center in Mountain View, California.



A LARGE gathering for National Astronomy Day at the SBMNH. Photo: R. Gutierrez.

OUTREACH SUMMARY

A big **THANK YOU!** to all the volunteers who helped out at Astronomy Day. Since the last report, AU volunteers Andy Allen, John Boyd, Bob Brown, Timma Buck, Chad Caprio, Bill Clausen, Krissie Cook(!), Jason & Tim Crawford, Joe Doyle, Ed Edwards, Nancy Emerson, Mike Farris, Tony Galván, Ruben Gutierrez, Laurence Harms, Art Harris, Jürgen Hilmer, Marv Johnson, June Kelley, Jeremy Kerby, Tom King, Marcia Kuplerski, Chris Larson, Dale Lowdermilk, Zanna Lucy, John Martinez, Pat & Chuck McPartlin, Max Neufeldt, Ron Nixon, Edgar Ocampo, Barb O'Grady, Jiri Polivka, Bob Richard, Javier Rivera & Samantha Thompson & the Quasars, Nancy Rohrer, Tom Totton, John West, Tom Whittemore, Jim Williams, Jerry Wilson, Paul Winn, and Tim Wittenburg showed neat stuff in the sky to 2033 customers.

MAY EVENTS

Here are the AU events scheduled so far for May. To get the latest information on schedules, or directions, just contact Chuck at 964-8201 or <u>macpuzl@west.net</u>

SATURDAY, MAY 1, ARRIVE BY 6 PM

Telescopes for 2,000 Girl Scouts at Live Oak Camp, just east of Cachuma Lake. Enter by the road next to the Rancho San Marcos Golf Course, and follow the signs to the camp.

THURSDAY, MAY 6, 10:30 AM

Dedication and Ribbon Cutting Ceremony for the Westmont Observatory and Track & Field, outside of the observatory.

Friday, May 7, 7 PM

Monthly meeting in Farrand Hall at SBMNH. Start with a quick planetarium show by Javier, then hear a talk by former AU member and now NASA scientist Dr. Rus Belikov, about the Terrestrial Planet Finder project.

<u>Saturday, May 8, 6 PM</u>

AU planning meeting in the classroom next to Javier's office – all AU members welcome.

<u>Saturday, May 8, 8 PM</u>

Monthly Public Star Party outside Palmer Observatory at SBMNH.

WEDNESDAY, MAY 12 - SUNDAY, MAY 16

Annual RTMC Astronomy Expo at Big Bear Lake. Hang out with 2000 or so of your favorite amateur astronomers at 7000 feet. Not held on Memorial Day weekend this year!

TUESDAY, MAY 18, SETUP 7 PM

Telescope Tuesday at the Camino Real Marketplace in Goleta. We set up in the plaza between Borders and the theater.

TUESDAY, MAY 18

Telescopes for Trinity Episcopal Church – contact Ruben or Bob Richard for details.

FRIDAY, MAY 21, SETUP 7 PM

Telescopes for the monthly Public Telescope Night at Westmont College, at their new observatory, next to the baseball field.

SATURDAY, MAY 22, SETUP 8 PM

Telescopes for campers at Refugio State Beach. We set up in the day-use parking lot, at the west end.

MONDAY, MAY 24, SETUP 4:30 PM

Telescopes for Science Night at Harding School, 1625 Robbins Street in Santa Barbara.

TUESDAY, MAY 25, SETUP 8 PM

Telescopes for a group from Carpinteria Family School, camping at the Anza Group Site at El Capitan State Beach.

WEDNESDAY, MAY 26, SETUP 7:30 PM

Telescopes for guests at the Biltmore Hotel. Contact Chuck for information.

THURSDAY, MAY 27, SETUP 5:30 PM

Telescopes for Science Night at Brandon School in Goleta, at 195 Brandon Drive.

FRIDAY, MAY 28, SETUP 7:30 PM

Telescopes for campers at Carpinteria State Beach. We set up next to their ranger station, just to the right before the main entrance.

SATURDAY, MAY 29, SETUP 8 PM

Telescopes for campers at Cachuma Lake. We set up in the open field at Dakota Plains.

SUNDAY, MAY 30, SETUP 7:30 PM

Telescopes for Bacara Resort and Spa in Goleta. We set up on the Miró Lawn.

FROM THE PRESIDENT'S PEN....

Ruben Gutierrez

Wow, International Astronomy Day was one for the books! Although the weather was of some concern in the morning, the skies cleared up at noon time and the afternoon was a classic Santa Barbara Day, that was followed with an even more spectacular evening. This year's large crowd enjoyed the numerous displays and hands-on exhibits that the Astronomical Unit and the Santa Barbara Museum of Natural History put on, with the event reaching a fever pitch when the free raffle of the 8-inch Dobsonian telescope and Celestron Sky Scout (along with 12 other great prizes) took place. Congratulations to all of the winners!

I wish to thank all the members who worked so hard to put on this exciting event, and of course the Santa Barbara Museum of Natural History.

Special thanks to Chuck and Pat McPartlin for their expert guidance and planning, Tim Crawford and Tim Wittenburg for arranging the tasty lunch, Timma Buck for the two big trays of delicious cookies and brownies. Javier Rivera and Samantha Thompson for their administrative and helping hands support, Andy Allen, John Boyd, Bob Brown, Chad Caprio, Bill Clausen, Krissie Cook, Jason Crawford, Joe Doyle, Ed Edwards, Nancy Emerson, Tony Galván, Brother Laurence Harms, Art Harris, Jürgen Hilmer, June Kelley, Jeremy Kerby, Marcia Kuplerski, Chris Larson, Dale Lowdermilk, John Martinez, Max Neufeldt, Ron Nixon, Edgar Ocampo, Barb O'Grady, Jiri Polivka, Bob Richard, Nancy Rohrer, Tom Totton, Tom Whittemore, Jim Williams, Jerry Wilson, and Paul Winn for staffing the booths, exhibits and telescopes, as well as new members Don and Nollie Dawson for the coffee and donuts the morning set up crew enjoyed so much! Fantastic job everybody!!!!!

I'm happy to welcome aboard new members Chris Benton, Mark Brickley, Don & Nollie Dawson, Rod Fritz, and Gary Yencich. I also wish to thank renewing members Timothy Rodgers and Mike Lawson and family for their continued support of this truly community-minded Astronomy club.



This may be where it all starts ... Photo: R. Gutierrez

OUR INTRODUCTION TO ASTRONOMY

Steve Lange

A few weeks ago my family and I attended a SBAU Star Party at the Museum of Natural History. We really had a blast seeing all the cool stuff. My kids (ages 3 and 5) were especially impressed by Chuck's Campo del Cielo meteorite - "the rock from outer space!" - and all of us enjoyed good views of Mars, the Orion Nebula, Bode's Galaxy, the Cigar Galaxy, and the Pleiades (my personal favorite). We really enjoyed looking through the big Dobsonians in "the Pit" and I was truly impressed by Tim's stories about building his 'scope - 80+ hours grinding and polishing the primary mirror alone! Wow! We left with a big packet of papers including a sky chart, a SBAU newsletter, a list of websites to check out, and more. We were all charged up by the experience. It seemed like such a perfect opportunity to introduce my children to how cool our universe is, and how exciting and fun science could be. We sent in our membership early the following week, and I decided to begin investigating the purchase of a telescope, our first ever. Through a fortunate stroke of luck, the club's annual Messier Marathon happened to be scheduled for the following weekend. I thought that it would be a fantastic opportunity to really get an appreciation for all the different types of telescopes and their capabilities. The intervening week seemed to pass slowly (time dilation perhaps?), and I spent the evenings checking out links in the packet we'd received as well as doing web searches about different telescope types and general astronomy topics. I also checked out a few books about telescope construction from the downtown library, finding them to be great sources of information about the nuts and bolts (quite literally) of telescope function. The Messier Marathon did not disappoint! Nearly every conceivable telescope type was on display, from Tim's awesome 10" truss Dobsonian, to Paul's amazing astrophotography setup. I did a lot of viewing through Chad's Schmidt-Cassegrain as well as heard him present the full case in favor of a motorized Goto mount. Ron shared some nice views through his refractor as well as helped me learn some new constellations and stars. When the boys got sleepy around 9pm, I drove them and my wife back home, then made some coffee, put it in a Thermos, and headed back up. I ended up staving till just after 2am and really enjoyed myself! All in all it was a fantastic introduction to the astronomy

hobby and we really appreciated everyone's time and positive energy. My wife and I remarked a number of times on the drive home and the days afterwards how nice and friendly everyone was. It's looking like a fun activity for us as a family, so big thanks to all of you for such a nice experience. Those big Dobs ended up being our hands-down (or should I say, "hands-on") favorites. I didn't think I had it in me to make one from scratch, but a Dob with a Telrad was definitely the way forward for us. So the following week I set out in earnest to locate a scope. I began exchanging a series of very helpful emails with Tom and Tim C (that email chain eventually led to the writing of this article). Through another interesting stroke of good luck, I was able to locate three used Dobs and viewed them on three successive nights, reporting my results and impressions back to Tom and Tim via email. Ultimately, and not without a good deal of helpful input and advice from my mentors, I selected a gently used Discovery 10" f/6 PDHQ, located via the CloudyNights.com classifieds. Shortly thereafter I also picked up a couple of eyepieces (a 24mm Panoptic and a 13mm Nagler Type 6) as well as a Hotech laser collimator. Lastly, we got a Celestron FirstScope so the boys would have something "their size" (which was a big deal for them, although as it turns out they're quite happy to scramble up a small stepladder, too). We were ready for some serious viewing! Thinking back to my own childhood, I reflected on the many lunch breaks spent in my elementary school library, a chubby, nerdy kid with thick glasses, poring over books about the solar system and the stars. Saturn was always my favorite.... Seeing it through a telescope for the first time at the Messier Marathon was amazing, but seeing it that first night at home through our very own 'scope, in our own front yard, and having such a great view of its rings, its moons, and its bands was so special that I nearly teared up! Truly the culmination of a lifelong dream. And that was only at 115x... just wait till I get my barlow! José Luis, my 5 year old, stayed out waaay past bedtime with me that night, observing through the Discovery as well as through the little FirstScope. He was very adamant about "doing it himself" when it came to aiming the little 'scope... the apple does not fall far from the tree I guess :-) Having both telescopes is working out really well for us so far, and the boys are very excited to attend the next Star Party at SBMNH and show them off! Big thanks to all of you for the wonderful introduction to this hobby.

Given the realities of having little guys growing into bigger guys, we may not be able to be very active in the club at the current time, but we will definitely participate as much as we can. My wife is onboard too, and really loving the views, so it looks like we've got the whole family involved. The family that stargazes together... :-)



A young astronomer gazes into the unknown at a recent Hope School outreach. Photo: T. Totton.





MORE FROM NATIONAL ASTRONOMY DAY...

Photo credits: R. Gutierrez





ARTS CORNER

They Hide in Heaven Jürgen Hilmer

Hubble and Heaven hint of places Where Giant Forces of Dark Energy And Matter act now.

But, for Us Humans to know why They exist is a mystery for now!

Venus

Ibrahim Ibn Salma

I looked into your soul With a telescope, I saw glowing patterns, Constellation - perhaps, You raised your soul to your lips I kissed you, This is the kiss I always wanted.

Stars

Robert Frost

How countlessly they congregate O'er our tumultuous snow, Which flows in shapes as tall as trees When wintry winds do blow!

As if with keeness for our fate, Our faltering few steps on To white rest, and a place of rest Invisible at dawn,--

And yet with neither love nor hate, Those starts like some snow-white Minerva's snow-white marble eyes Without the gift of sight.

Behold, directly overhead, a certain strange star was suddenly seen . . . Amazed, and as if astonished and stupefied, I stood still.

- Tycho Brahe

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AU AstroNews, the monthly publication of the Astronomical Unit (AU), is mailed to the AU membership. For publishing consideration for the next month, submit astronomical items by the 20th of the current month!

AU annual membership rates: Single = \$15 Family = \$25

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On the Web: <u>http://www.sbau.org</u>

May 2010								
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday 1 Live Oak 6PM		
2	3	4	5	6 WESTMONT CEREMONY 10:30 AM	7 AU General Meeting 7 PM	8 Plan 6 PM SBMNH Star Party 8 PM		
9	10	11	12 RTMC STARTS	13	14	15		
16 RTMC Ends	17	18 Camino Real Marketplace 7PM	19	20	21 Westmont College 7PM	22 Refugio State Beach 8PM		
23	24 Harding School 4:30PM	25 EL CAPITAN STATE BEACH 8PM	26 BILTMORE 7:30PM	27 O BRANDON SCHOOL 5:30PM	28 Carpinteria State Beach 7:30PM	29 Cachuma Lake 8PM		
30 BACARA RESORT 7:30PM	31				1	I		

The Astronomical Unit

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