



THE OBSERVER

SAN BERNARDINO VALLEY AMATEUR ASTRONOMERS

Member of The Astronomical League

2009, International Year of Astronomy

<http://sbvaa.org/>



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Since 1958

July 2009

Meeting:

July 18, 2009

Location:

San Bernardino County
Museum, 7:00 p.m.
Redlands, CA. California St.
exit, I-10 Fwy.

Pre-meeting Dinner, 5:00 p.m.,
Hometown Buffet, Loma
Linda, CA

After the meeting telescopes
will be set up for viewing and
members will be available to
answer questions. Bring your
telescope to observe with us.

*No telescope is too humble, and
beginners are always made
welcome!*

After viewing the group will
head for Coco's in Redlands,
Tennessee exit, I-10 Fwy.

Program

Cosmic Cataclysm:

Dinosaurs, Asteroids, and Mass Extinctions



This month's program is by our own Matt Wedel who is a vertebrate paleontologist. In the talk he will discuss his research on dinosaurs and birds in the field and in the lab, what the world of the dinosaurs was like in the Late Cretaceous period, the effects of the asteroid impact, and the potential for future asteroid impacts on Earth.

His main areas of interest are the giant, long-necked sauropod dinosaurs and the evolution of pneumatic (air-filled) bones in dinosaurs and birds. In my research I use information on living animals, especially birds, to reconstruct the lives of sauropods and other extinct animals. Many people know that the bones of birds are hollow, and in fact they are connected to respiratory system and filled with air. It is not as widely known that birds inherited these pneumatic bones from their dinosaurian ancestors.

(More about Matt and his studies, in his own words, on page 3)

SBVAA Officers

President: James Butts 909-383-1443

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Star Party Coordinator: Tom Lawson 909-8828198

SBVAA Webmaster: Steve Miller 626-859-7776

Newsletter Editor: Jim Sommer 909-792-3587

Calendar of Upcoming Events

June 28, "Beyond the Apace Shuttle," at the Altadena library

July 18, Southern California Astronomy Expo at OPT, Oceanside, CA (You can go down for the day and still be back in time for the meeting.)

July 25, SBVAA Star Party, location to be announced.

August 15, Club meeting at the Museum

August 22, SBVAA Star Party, location to be announced

Moon & Saturn Party: A big success!

By Jim Sommer, editor

Saturday night, June 27, was a landmark public outreach for our club. Why? Because the local paper (The Redlands Daily Facts) gave us front page coverage in their Tuesday, June 30, issue. The article was nicely written by their staff reporter Chantel Lovell. Pictures of Rudy and I figured prominently. Chantel said there were about 10 members with their scopes there but it seemed like there were several more than that. The crowd was large and enthusiastic. I didn't get a head count but it seemed like there were at least 300 of the public cycling through the various stations.



Rudy tweeking the the focus on his big Dob.

(Photo by Chantel Lovell
Redlands Daily Facts)

(For the full article see:
http://www.redlandsdailyfacts.com/ci_12713179)

Your editor showing a young man the wonders of the Moon.

(Photo by Chantel Lovell
Redlands Daily Facts)



As is often the case at these events, many adults said this was the first time they had ever looked through a telescope. For many of the younger in the crowd, the views made real and reinforced what they were learning in their classrooms.

Each time we put on an event like this we open minds and touch the future. We also can help dispel bad information about astro-events -- like the recurring one about Mars being as big as the Moon this coming August. We can also help educate the public about light pollution issues and help them understand the different scope designs and which one might be best for them.

Who knows which 6 year old of today might be the Lyman Spitzer of tomorrow!

CALENDARS

The 2010 “**Deep Space Mysteries**” calendars from Astronomy Magazine are here. It will be available for sale starting with the club meeting on September the 12th. We will have 30 for sale on a first come first served basis. The retail for this calendar is \$12.95 plus \$1.00 tax or \$13.95 altogether. Your cost, through the club this year, is \$8 a savings of \$6.

See Fidel, the club treasurer, at the back of the room before or after the meeting to make your purchase. Reservations are accepted.

Editor’s Message

By Jim Sommer

Saturday night, June 27 -- what fun! A large and enthusiastic crowd for our Moon & Saturn outreach at the museum kept everyone on their toes. I didn’t get a count but it seemed like we had over a dozen scopes of various designs and sizes present. And again I was surprised at the number of people who had never looked through a telescope.

Sometimes I think we forget just how wondrous that first look is (or was). Lord Byron phrased it well:

*“In her starry shade of dim and
solitary loneliness, I learn the
language of another world.”*

I hope we have many more opportunities to teach that new -- yet old -- language.

(Matt Wedel cont. in his own words)

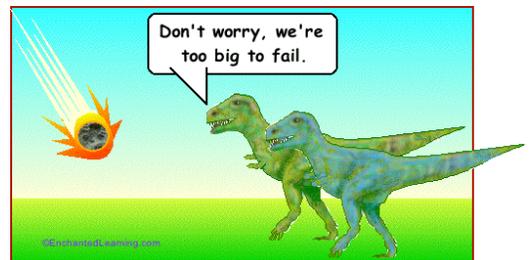
Pneumatic bones show that the respiratory systems of dinosaurs must have been similar to those of birds. Also, the light construction of the pneumatic bones probably helped some dinosaurs grow to immense size—especially the sauropods. Still, there are a lot of unanswered questions in this area, and I am working on the evolution, development, and function of pneumatic bones in dinosaurs and birds.

My training in paleontology started at the University of Oklahoma, under Dr. Richard Cifelli. Some very large vertebrae—up to 1.2 meters long—had been found in Oklahoma, and they needed to be identified. The bones belonged to a dinosaur that was new to science, which we described as *Sauroposeidon* in 2000. I first learned about pneumatic bones when I was working on *Sauroposeidon*. I continued as Dr. Cifelli’s student for my Master’s thesis on the evolution of pneumatic bones in sauropods. In 2001 I finished my MS thesis and moved to California to pursue Ph.D. research at Berkeley. In my dissertation I worked on the evolutionary origin of pneumatic bones in dinosaurs, the respiratory systems of sauropods and other dinosaurs, and the evolution of large size and long necks in sauropods. I graduated from Berkeley in May, 2007. Now I am an assistant professor at Western

University of Health Sciences, where I teach gross anatomy to med students. I am continuing my research on dinosaurs and birds—there are many questions to answer.

This spring I have been fortunate to appear in two documentary series, “*Evolve*” on the History Channel and “*Animal Armageddon*” on Animal Planet. “*Evolve*” featured my work on air-filled bones and large size in dinosaurs, and in “*Animal Armageddon*” I discussed the asteroid impact that contributed to the mass extinction at the end of the Age of Dinosaurs. I will also appear in an upcoming episode of “*Animal Armageddon*” this summer, about the possibility of future mass extinctions.

PDFs of all of my papers are freely available at <http://sauroposeidon.net> and regular updates on my research are posted at a blog I run with two colleagues, <http://svpow.wordpress.com>.



The Grand Adventure vs. the Curse

By Cliff Saucier

We all look forward to the wonderful skies of Grandview all winter, but as the date approached, June Gloom had us in it's misty, cloudy grasp. The club meeting was upbeat, though, with everyone agreeing that "this is the way it always is. The clouds will blow away and it will be wonderful!". The enthusiasm was contagious, but the weather reports couldn't quite get with the program. Still I got work squared away, and when I awoke Thursday morning at four-thirty, decided to pack and go. Getting away is always nice.

Arriving at the campground after the breathtaking drive up 395 (the Sierra's are so majestic and the little communities so enticing), I found *puddles* in the road! Unusual, to say the least. Met Allen Wong, from RAS, at the site, and Ron Hoekwater, from PVAA, camping nearby. They said it had rained the night before, but here I was, so I set up anyway. Dozing in my chair under clouds, stars finally showed themselves at about ten-thirty. Got to work with my new scope (did I mention that yet?). Later Ron ambled over and we got better acquainted. He goes to many of the dark spots I frequent, and mentioned a few others as well. The drive was long, and about one o'clock I turned in.

Friday found Chris Clarke and Fidel Hernandez arriving first, as is their usual style, followed by almost everyone else as the day drew on. Day temperatures were in the seventies, with the evenings going down to the lower forties and high thirties. A little cooler than usual, and clouds started filling the skies. Everyone said they would dissipate when the heat of the sun abated. They stayed. And stayed. About ten, many of us turned in. I kept mostly dressed to be able to pop out and observe when it cleared, but the winds stayed so strong that the idea proved untenable. The Millers weren't coming till late, and some got clear skies at one-thirty when they arrived, with Fidel setting his scope on Jupiter before the morning sun rose. Passing by about nine, he was kind enough to share the view. Now I've never seen the planet in the daylight and that was great!

Blue skies again, and the turnout was really good, Tom Lawson counted twenty-seven, with a few of that number, guests of J.P. and Mary, club members from

Culver City. Rudy Rodriguez had some of his ex-students, Paloma and Vanessa and friend Demo. with their ten-inch dobs. Dave Morris showed, and he doesn't come that often. Paul Littlecoyote and his contingent from Big Bear. Almost everyone was there, in spite of very iffy clear sky projections. Good club bonding, but in the afternoon the clouds made a return engagement. Pizza for dinner, and for once the club didn't maintain it's hard-earned reputation, with a few whole pizzas surviving the onslaught intact. People had lost their certainty of the sky clearing and went to bed. Martin Carey and his family started a bonfire! Chris Clarke put his scope away. Sharon Carey was toasting mini-marshmallows several at a time on a twiggy branch. Depression reigned. Nine-thirty. Someone shouted out, "we have stars!" Miraculously the clouds were quickly clearing out. Everyone was roused and the Grand Show started. Perversely, one cloud stayed most of the night, a dark nebula directly in front of Sagittarius, blocking the view of our most coveted spot in the sky, but we got to see the rest of the heavens. Two a.m. and we were done, tired, but finally satisfied. These trips to observe under magnificently dark and clear skies are what first attracted me to this group. And everyone shows up! What a good time we had!

Now did I mention my new scope? Many would try to make me the scapegoat for the unseasonable weather. The "New Equipment" curse, you know. Well, I'm not buying into that. The truth is: we have had NO SUNSPOTS for this new solar cycle. Way overdue. Do you remember reading about the Maunder Minimum? The Little Ice Age? It's not going to be all my fault!

Fidel Hernandez & Vanessa Campa
Grandview, June 2009



For Sale

(all in like new condition)

Meade LX 200 8" SC Telescope with Telrad and spotter scope.

Televue 16mm Nagler type II eyepiece

Televue 22mm Panoptic eyepiece

Meade Series 4000 26mm eyepiece

Meade Series 4000 9mm Illuminated Reticle eyepiece

Parks GS-5 15mm eyepiece

Meade 4000 #140 Achromatic Barlow 1.25"

Meade Off axis guider

Meade 4000 f 6.3 Focal Reducer / Flatteners

Meade Variable Proj. Tele-Extender

Parks ALP SC rear cell Broadband filter

Lumicon UHC 1.25" filter

Lumicon Oxygen III 1.25" filter

All for Best Offer, Please serious inquiries only. Call Jack Hoffman at (951) 924-6652

8" Newtonian reflector, ATM built in 1968. Focal ratio not known but appears to be around f/7 to f/8. Comes with heavy duty mount with 4" brass bearings and appropriate counterweights atop a heavy steel pier with 3-point truss legs. \$500., or trade?

Contact David Millar, 760-900-1554

Do you have some equipment that you would like to sell, trade or give away?

Want to still "keep it in the family?"

Contact your newsletter editor and I'll put it in the club newsletter. It's free!

Julian Starfest August 20 - 23, 2009

The second annual Starfest will be held on the above dates high in the Cuyamaca Mountains of San Diego County at the Menghini Winery.



Campsites, hotels, lodges and bed-and-breakfast inns are available for participants. There will be lots of activities including vendor exhibits, various speakers and a swap meet. Historic Julian offers a variety of daytime activities for attendees: Gold mine tours shopping and of course the famous Julian apple pie shops.



For additional information:

Mailing Address

Julian Starfest
P.O. Box 2007
Julian, CA 92036

Email Address

<http://www.julianstarfest.com/>

By Phone

(760) 765-1083

A Grand Time for Rudy's Students

By Rudy Rodriguez

As the budget cuts have affected many jobs, programs and lives across the state, it has also reached deep into the educational system. As a result, our school cut many elective science courses including my astronomy program. Sad indeed, as I had many students approach me saying they had wanted to sign up for next year's astronomy class.

One bright spot was that it ended on a very good note. This year's classes were superb, hard working, fun loving students that were definitely a pleasure to teach. This year I gave away four telescopes (2 10" and 2 8" Dobs) and 2 pair of Barska binoculars to this year's students with the highest overall scores for the year.

One of these students, Vanessa Campa and her sister Paloma Campa (a former student) and their friend Demetrio, joined me at Grandview for first light under dark skies with their 10 inch Dobs. This was also the first time either young lady had been camping, and there is nothing more enjoyable for a teacher than to see the look of excitement as students discover new facts about our world and the universe.

In this International Year of Astronomy I have the satisfaction of knowing that we have helped people young and old, get a chance to view various celestial objects, answer question they have, and discover more about their universe through our outreaches, club meetings, and star parties. I thank all of you that had the patience to show my students various views through your telescopes throughout the past years! I receive emails from many of these students and they state that these moments are some of their fondest memories about their high school science experience.

For Vanessa and Paloma, the weekend went by too fast! They would have loved to have stayed for a longer period of time, and have assured me they will join us for other star parties.

Thanks Cliff and Martin for allowing them to see some really fabulous deep sky objects through your telescopes. For their first deep sky experience, looking at NGC 4565, the Trifid Nebula, M13, and the other objects that you showed them was a great way for them so see first- hand what we discussed in the classroom!

