FIRST LIGHT

Journal of the South Bay Astronomical Society - March 2004
on line at www.geocities.com/sbas_elcamino

Monthly General Meeting: Friday, March 5th, 7:30 PM

Guest Speaker: ***Dr. William Patzert (JPL)***

"When the Pacific Speaks – Los Angeles Listens"

Film Premier Invitation: "Universe – The Cosmology Quest"

The Sidewalk Astronomers will be hosting the world premier showing of "Universe - The Cosmology Quest". The premier will be held Wednesday, **March 3rd**, at the Autry Museum's Wells Fargo Theatre, 4700 Western Heritage Way, Los Angeles, California with two showings at **6:30pm** and **8:30pm**. Several of those interviewed in the film will be attending. Seating is extremely limited, so everyone must RSVP to the contact information below. There will also be screenings held on Saturday, March 6th, at the Randall Museum, 199 Museum Way, San Francisco, CA 94114 at 6:00pm and 8:00pm. Again, seating here is also extremely limited, everyone must RSVP.

"Universe" is a unique mixture of a human interest and science documentary film. It exhibits a profound understanding of the scientific and human struggles in astronomy and cosmology during past decades, and is the first comprehensive film to deal with major new approaches in non-Big Bang cosmologies. Told with unbiased candor and simplicity, "Universe - The Cosmology Quest" is the story of the personal and scientific endeavor of a number of leading cosmologists to present different, if not more validated, explanations of the universe in which we all live, and to do so in a language both appealing and excitingly easy to understand. Interviews with renown cosmologists Sir Fred Hoyle, Geoffrey Burbidge, Jayant Narlikar, Jean-Claude Pecker and Halton Arp as well as a pallet of extraordinary astronomers and scientific personalities such as Philosopher and telescope designer John Dobson, Jack Sulentic, Nobel Laureate Kary Mullis, and many, many others.

Divided into two chapters, 1: Quasars and the Discordant Redshift Problem, 2: The Theoretical Weaknesses in Big Bang Cosmology and Insights into the Plasma Universe; the film opens new doors for understanding the wealth of observational information and stimulating ideas which have arisen in recent years. The role media and professional prestige has played in forming and supporting this paradigm emerges, in what may be considered an exciting look into one of the most heated and interesting debates in science today.

"Universe – The Cosmology Quest", makes use of high-end 3D animations and motion graphics accompanied by an originally composed symphonic score and a full 6 track Digital stereo sound mix, making this documentary presentation - a feast for both the mind and the eyes!

RSVP/ Los Angeles
Donna Smith, email: dsmith1055@earthlink.net
818-846-1722 (daytime starting Feb 16) or 818-848-4533 evenings/message

RSVP / San Francisco
Phil Rice, email: prsfca@circlelimit.com
(415) 497-8564. (cell)

- ***Alex Athas***

SSA - MESSENGER Scholarship Deadline March 1st

Do you know a space-enthusiast, college-bound student who could use some extra scholarship money? If so, please pass along information about the MESSENGER Scholarship. The MESSENGER Scholarship is being sponsored to create interest in the mission and support continuing education. Don't delay - the deadline for receipt of applications is Monday, **March 1, 2004**. More information about the scholarship and the application process is at: ***http://messenger.jhuapl.edu/scholarship/index.html***

- Joe Fierstein

4th Annual SBAS Messier Marathon

On the evening of **March 20th**, SBAS will be holding our **4th Annual Messier Marathon**. Everyone is invited to join us for this outing. Bring your own telescope or share the views through the club's Nexstar 8 or other club member's instruments. In theory, this is the night when you can observe all of the Messier Objects in one all-night session!

The weather will be a factor in determining which dark sky site will be used. The temperatures can get very cold at night during this time of year and we can't stress enough the need to dress warmly. Bring some snacks and drinks for the late night munchies. Call or email me to coordinate our plans. I hope to see many of you there!

- Greg Benecke

Lomita Math and Science Magnet School Star Party

SBAS members will support a series of star parties for the Lomita Math and Science Magnet School on the following Saturdays, **March 27th, April 24th,** and **May 8th**. It was serendipitous that we had 13 scopes at their last star party, which brought out around 200 students and parents! We should probably plan on people with scopes arriving before sunset, between 5:30 and 6:00 PM, to set up.

Location: Lomita Math & Science Magnet School, 2211 W. 247th Street, Lomita, 90717. The school is located near the intersection of Lomita Blvd. & Narbonne Ave. You can use MapQuest to get a free map and driving directions at ***http://www.mapquest.com***

- ***Greg Benecke***

Mt. Wilson Observatory Trip Reservations

There are still a few open spots for the **May 15th** Mt. Wilson Observatory night with the 60-inch telescope and anyone that desires to attend, should lock in their reservation by paying the $36 fee at the March 5th General Meeting. Preference is given to SBAS members before non-members. Treat yourself to a great night of observing and stimulating conversations with fellow SBAS members and the Mt. Wilson staff!

- ***Greg Benecke***

Notice Concerning Parking at ECC

We now have official permission to park on campus. The best parking is along Manhattan Beach Blvd., on either side. From Manhattan Beach Blvd. - enter the campus at the traffic light on Lemoli Street. Turn right (west) on the service road paralleling Manhattan Beach Blvd. and continue less than a block to parking lot C. You will then have to walk east, past the long shop building, and make a right at one of the entrances to the Planetarium, which is the only round building on campus.

Sergeant Johnston of the ECC Police Dept. has asked dispatch to input all of the 2004 SBAS General Meeting dates into the computer so that they do not cite the attendees parked on the north side of the campus from 7-11 PM. Our host instructor for the evening will call the campus police just to remind the front desk that we will be in the planetarium. This way they can remind the officers and they will know just in case someone shows up at the front desk and needs directions to the planetarium.

- Dave Pierce

Our SBAS Committee

President	Greg Benecke	217-1512	BeneckeRUs@aol.com
Program Chairman	Joe Fierstein	377-9834	Joefiers@aol.com
Treasurer **Newsletter Reproduction** **Astronomical League Rep.**	John Collins	- - -	jcollins@runbox.com
Astronomical League Liaison	Bill Eisele	542-5070	- - -
SBAS Website Webmaster	Alex Athas	- - -	sbas_elcamino@yahoo.com
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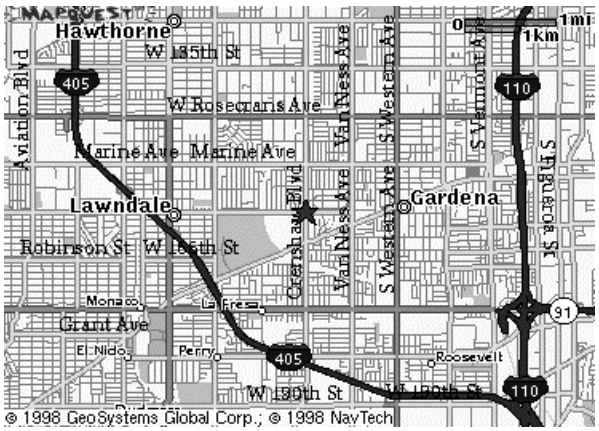
Executive Committee	Ron Rennie	326-5589	Rkgrennie@yahoo.com
	Mike Mayerchak	831-9188	Mmayerchak@aol.com
	Mark Braden	540-2810	Bradenm@fnic.com

Monthly General Meetings



We normally meet on the first Friday of each month at 7:30 p.m. in the Planetarium at El Camino College. If the first Friday is on or close to a holiday, we usually defer the meeting until the second Friday of the month.

The Planetarium is on the south side of Manhattan Beach Blvd., one block west of Crenshaw Blvd. (near the center of the map at left). Click on the map to get a display that can be zoomed out for a regional view. The zoom display appears in a separate browser window, which can be closed to return to this page.

The domed roof of the planetarium is visible from the street. There is on-street parking, and we can often use campus parking: check inside to see if you need a FREE parking permit for your car. Park in northeast corner lot, temporarily, due to the construction project.

We enjoy the planetarium facilities through the courtesy of the El Camino College Administration, and have several faculty members of the Astronomy Department as members of our Club. Our meetings always include an informal opening, when new attendees are invited to introduce themselves and let us know about their interests in astronomy. Members share their latest news and observations at this time. The rest of the evening is devoted to guest speakers, who range from amateur astronomers to professional astronomers to representatives from local aerospace companies to college professors. We are fortunate to have all these talented people in our area, willing to come and talk to us.

Monthly Planning Meetings

Committee members (and anyone else with an interest in Society activities) meet each month, usually on the Monday following the general meeting. Meetings are sometimes rescheduled due to travel and other circumstances. Exact date and time of each month's meeting will be announced in the schedule of events in *FIRST LIGHT* each month, and should also be verified with a committee member by any member or visitor wishing to attend. All are welcome!

We will meet on Monday, February 9th at 7:30 PM at the home of Ray Grace, 2706 Spreckels Lane in Redondo Beach (310) 370-1913. Take Hawthorne Blvd to 190th St., turn West to Inglewood Ave., then turn North (right) and proceed two blocks to Spreckels Lane and turn Right. If driving South on Inglewood Ave., Spreckels Lane is two blocks south past the light at Ralston Ave., and turn Left, to the 4th house on the right (South side). Parking is available on both sides of the street.

SBAS Membership Benefits

"Welcome" to our newest SBAS members: Todd Mabey, R.H. Wiggins II, Nora DeMuth, Timothy J. Moore, Mark Stratton, Michelle Becket, Martin C. Magat and Les Berg.

Contact John Collins for magazine subscriptions at club rates: "Sky & Telescope" $32.95 and "Astronomy" $29.00! Make your check payable to SBAS and mail the payment and your subscription / renewal form directly to South Bay Astronomical Society, P.O. Box 1999, Redondo Beach, CA 90278.

Part of your SBAS membership dues goes toward membership in the Astronomical League. All paid members should be receiving the "Reflector", the league's newsletter, four times a year. As a member organization, we can participate in a number of award programs they offer. These are based on completing various observing challenges. Check out the Astronomical League website at **www.astroleague.org**

NexStar 8 Available to SBAS Members

All members in good standing (with at least six months of continuous membership) can borrow the club's Nexstar8 for up to 7 days. The fee of $5 for a weekend, or $10 for an entire week, is nonrefundable and will be added to the club's Accessories Fund "Wish List" for future purchases. A fully refundable deposit of $200 cash or check is required. Loss or damage is the responsibility of the borrower. A copy of the complete South Bay Astronomical Society Nexstar 8 Borrowing Rules and Agreement is available upon request. The **Accessories Fund "Wish List"** – Member contributions of any amount or donations will be appreciated, as will any suggestions for new purchases!

March - Comets & Asteroids

Comets Visible In March:

Name	Magnitude	Constellation
2003 H1*	11-12	Hyd
Wolf-Harrington	12	Ari
2002 T7+	7	Psc-Peg-Psc
2003 T3 (Tabur)+	9.5	Aqr-Psc-Peg

Comets at Perihelion:

Date	Identification	Magnitude
March 17	Wolf-Harrington	12

Near-Earth Asteroid Flybys:

Date	Identification	Magnitude	Distance
March 17	3001 Michelangelo	15.8	1.46 AU

*Closest Approach to Earth on March 15
+Visible briefly after sunset

Check the JPL Ephemeris Generator page for coordinates of the objects at:
http://ssd.jpl.nasa.gov/cgi-bin/eph

- ***Ken Munson***

Widefield Shots

I posted these new astrophotos on my website recently, which I finally processed from the last new moon on Jan. 24th taken at Inyokern. I worked on them this weekend while listening to the rain (sigh)! I hope you enjoy them: Cassiopeia, M45 The Hyades and The Pleiades, IC1805 The Heart Nebula, Orion Nebula and M31 & M33.
http://home.earthlink.net/~stevelindsey

First try using Chris Cook's old Nikor 105mm lens that I bought from him over Christmas and my first use of a diffusion filter to highlight bright constellation stars. I got some bright ring effects that I didn't expect, probably due to moisture from thin high clouds that night (any other ideas?). Stars were slightly trailed which also surprised me at 105mm and I carefully drift aligned, so I guess I better guide with the trusty ST4 next time.

- ***Steve Lindsey***

Ridgecrest School Observing Session Reports

I was surprised at how many people were showing their love this Valentine's Day - their love for the night sky, that is. **Feb. 14, 2004**, was our monthly Ridgecrest School Star Party. As the sun set just after opening the gates, a bank of high clouds moved in from the West. By the end of twilight, it was completely overcast. The few who were there at that point were content to set up, hope for the best, and enjoy good conversation. About 7:00 we started to spot bright stars through the overcast and those with computerized scopes commenced their two star alignments. The sky continued to clear and the seeing improved as the night wore on.

For a while I was helping a gentleman and his son who live next to the school learn how to do a polar alignment and operate a C90 Maksutov on a German Equatorial Mount. I was so involved helping them that I did not notice how may people had arrived. Unfortunately, I did not get around to getting the names of everyone there, but there were about 10 scopes and quite a few new faces. As the hour grew late and the numbers declined, Jupiter was getting fairly high and the sky was pretty steady. The Great Red Spot reached the central meridian. This was my first good look at the Great Red Spot through my 15 inch Dob. We were able to push the power up over 400X. Saturn was also looking very nice with the Enke Minimum and the Crepe Ring detectable. Ultimately the marine layer moved in and the night was over.

- Greg Benecke

Saturday the 14th was bright and clear and the clear sky clock page predicted good viewing conditions for the night. So, naturally, the clouds moved in just as the sun set. We spent the night alternately dripping in damp fog and startlingly clear skies. When it was clear, the viewing was very sharp. Early on, I tried to find Comet 2002 T7 but it was too low in the western cloudbank to make it out clearly. Venus turned out to be pretty good when viewed through a light cloud layer. Helped dim the incredible brightness of its clouds, I guess.

The day before, a friend at my office had shown me his new Televue 8mm eyepiece. It looked very nice but, not having a telescope handy, I couldn't really judge how well it performed. I mentioned it to Al Fader and he handed me his 10mm Televue just as the clouds overhead parted and said “Try this”. Swung the N11 to Saturn to check it out. OH...MY...GOD!!!!! What an incredible view! I'd thought my $99 eyepiece kit was pretty good but this was like seeing a whole other planet! Finer gradations in the rings were visible than I'd ever seen before and the faint innermost ring stood out in sharp clarity to the dark gap between it and the planet. The cloud bands of the planet itself showed incredibly detailed contrast. I counted at least 8 different cloud bands from pole to pole. Unfortunately, I had to give back his eyepiece before Jupiter got high enough to clear the clouds and fog banks.

Even with my eyepiece kit, though, I got a really good view of Jupiter as the clouds miraculously cleared just as the Great Red Spot floated into view. The three of us who had the largest scopes all noticed a large black spot in the north equatorial belt and we all wondered if that was something new or had people observed it before. The turbulence in the south equatorial belt around the Great Red Spot was really something to see. The fog rolled in again while we were viewing Jupiter and since it was quite thick I decided to call it a night. As soon as I put the last item in the car and slammed the door shut, I looked up to see a completely clear sky with bright, non-twinkling stars! I decided to get out my 10x binoculars and see how many Messier Objects and others I could find from just memory. I managed to find M35, M36, M37, M38, M44, M41 and M45 (ok, anyone can find that). Found the Christmas Tree cluster, too. Now I finally understand why it's called the Christmas Tree cluster. Even in my old N5, it was too much magnification to really see the shape. Very cute! It was a great night in spite of the less-than-cooperative weather.

- Ken Munson

Whaley Middle School Star Party A Success

We want to thank you, Greg, and the members of the SBAS who came to our Star Party at Whaley Middle School in Compton on **January 30**. The Star Party was an enormous success. Several hundred people were there and the kids have been talking endlessly about seeing craters on the moon and the rings of Saturn. It was such a thrill in class the following week to hear kids excitedly listing the things they saw ("and I saw the moon, and Saturn, and Venus and the Orion Nebula..."). Joe came to speak in my class before the Star Party and that really enhanced the students' experience that evening. That was also the first time a lot of the school staff members ever looked through a telescope and they, too, have been telling me what an amazing experience it was and that they had no idea what it would be like. We sold 100 glow-in-the-dark necklaces and lots of cheese nachos which will fund the students' activities, so thank you for giving us the opportunity to help the students in other ways as well.

- Nancy Balter, the Whaley Middle School Staff and Students

SBAS Membership in NASA Night Sky Network

TO: South Bay Astronomical Society

This is to notify you that your astronomy club has been accepted for membership in the NASA Night Sky Network. This is an outreach program designed to promote astronomy and space exploration in our schools. JPL & ASP provide the materials and we provide the outreach. NASA/JPL and ASP are as excited to have you as a member as we hope you are in becoming a member!

Within the next few days, you will be receiving an email notice with your username and password to log into the members-only pages of the Night Sky Network: ***http://nightsky.jpl.nasa.gov/***. At that time your club will show as an active member of the Night Sky Network in the Club Directory. When you log in, you can change your username and password if you wish. You may also add more club members as participants in the Night Sky Network. You will have access to the Night Sky Network Discussion Board and all other member features. As a member, you will be able to download a logo for the Night Sky Network that you may post on your club's website and use on club correspondence.

During the first two weeks of March, your PlanetQuest Outreach ToolKit will be shipped to your club's address. You should receive the ToolKit no later than March 26th. You might want to incorporate some of the activities in your preparations for Astronomy Day, April 24th. We suggest that you plan to set aside 30-45 minutes at your April club meeting to introduce the ToolKit and the Network to your club members. To remain a member in good standing of the Night Sky Network, your club must use the Outreach ToolKit in a minimum of five outreach events a year. Timely and accurate logging of outreach activities and events into the Night Sky Network is essential to the success and continued support of the program. Event logging is done online and more details are available on the Night Sky Network website when you log in.

Congratulations and thank you for your dedication to astronomy public outreach. NASA, JPL, and the Astronomical Society of the Pacific look forward to supporting the needs of astronomy clubs like yours and to serving as a catalyst to bring together those clubs who share their love of the night sky with their communities. Please feel free to contact me if you have any questions.

- Astronomical Society of the Pacific

The Calm After the Cometary Storm

Having weathered its out-of-this-world sandblasting by cometary particles hurtling toward it at about six times the speed of a rifle bullet, NASA's Stardust spacecraft begins its two-year, 1.14 billion kilometer (708 million mile) trek back to its planet of origin. Stardust entered the comet's coma - the vast cloud of dust and gas that surrounds a comet's nucleus - on December 31, 2003. "We thought we would see a uniform increase in the number of particles the closer we came to the comet's nucleus and then a reduction," said University of Washington scientist Dr. Don Brownlee, Stardust's Principal Investigator. "Instead, our data indicate we flew through a veritable swarm of particles and then there would be almost nothing and then we would fly through another swarm."

Along with the cosmic taste testing, the spacecraft also took some remarkable images of comet Wild 2's five-kilometer wide (3.1-mile wide) nucleus. "Our navigation camera was designed to assist in navigation, not science," said Stardust's imaging team lead Ray Newburn. "But these are the best images ever taken of a comet and there is a remarkable amount of information in those 72 pictures. Not only did we image the jets of material spewing out from the comet, but for the first time in history we can actually see the location of their origin on the surface of the comet."

"Six hours after encounter we retracted the collector grid, with what we are all confident is an abundance of cometary particles, into the spacecraft's sample return capsule," added Tom Duxbury, Stardust Project Manager at JPL. "The next time the sample return capsule is going to be opened is in a clean room at the Johnson Space Center in the days following Earth return in January 2006." Scientists expect in-depth terrestrial analysis of the samples will reveal much about comets and the earliest history of the solar system. Chemical and physical information locked within the particles could be the record of the formation of the planets and the materials from which they were made. The Stardust Mission is the Von Karman Lecture Series subject for **March 18th** at JPL. More information is also available at ***http://stardust.jpl.nasa.gov***

Schedule of Coming Events

5 March Friday 7:30 P.M.	**Monthly General Meeting:** Dr. William Patzert, Research Oceanographer at JPL for 20+ years, presents "When the Pacific Speaks, Los Angeles Listens".
8 March Monday 7:30 P.M.	**Monthly Planning Meeting** Refer to page 3 for directions.
13 March Saturday Evening	**In-Town Dark Sky Observing at Ridgecrest School** – Weather Permitting: If the weather conditions are marginal, contact Greg Benecke to confirm that he will be opening the gate! Take Hawthorne Blvd. south across Pacific Coast Hwy.; continue up the hill past Silver Spur and turn left at Highridge. Go one mile and turn left on Whitley Collins, up one block and turn left on Northbay Rd., the new parking lot is at the end on the left. Enter parking lot and turn left, the gate is at the east end (it should be open about 15 minutes before sunset) and a paved road leading into the playground where we have traditionally set up. If at all possible, drop your equipment off and park your car in the new parking lot (less than 200 feet away). If you are absolutely certain that your vehicle does not drip anything you can park with your equipment. ***Drive with care*** to avoid steel pillars supporting basketball nets…
17 (JPL) 18 (PCC) March 7:00 P.M.	**Von Karman Auditorium Lecture Series** – FREE "Return to Sender: The Stardust Sample Return Mission" is presented by Tom Duxbury, JPL Stardust Project Manager. For more information call: (818) 354-0112. Current and archived webcasts can be viewed at **http://www.jpl.nasa.gov**
20 March Saturday Evening	**Out-of-Town Dark Sky Observing** – New Moon **The 4th Annual SBAS Messier Marathon –** Contact Greg Benecke to confirm site location.
27 March Wednesday Evening	**Lomita Math & Science Magnet School Star Party** SBAS will be supporting a series of star parties! See page 2 for details.
2 April Friday 7:30 P.M.	**Monthly General Meeting:** The speaker for the evening will be announced in the April Newsletter.
5 April Monday 7:30 P.M.	**Monthly Planning Meeting** The location of this meeting will be announced in the April Newsletter.
10 April Saturday Evening	**In-Town Dark Sky Observing at Ridgecrest School** – Weather Permitting. Refer to February 14th entry for directions to the site & instructions on weather conditions.
17 April Saturday Evening	**Out-of-Town Dark Sky Observing** – New Moon Apr. 19th Contact Greg Benecke to confirm site location.
24 April Saturday Evening	**Lomita Math & Science Magnet School Star Party** Celebrate Astronomy Day by sharing our enthusiasm for and knowledge of observing with our community. Details and directions to be published in the April newsletter.

South Bay Astronomical Society

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General Meeting at El Camino College Planetarium:
Friday, March 5th at 7:30 P.M.

Guest Speaker: Dr. William Patzert (JPL)

"When the Pacific Speaks – Los Angeles Listens"

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South Bay Astronomical Society
P.O. Box 1999
Redondo Beach, CA 90278

**** * * WARNING * * ****
Final newsletter to anyone whose membership expired in Dec. 2003 and has not renewed!