THE OBSERVER

SAN BERNARDINO VALLEY AMATEUR ASTRONOMERS
Member of The Astronomical League
Celebrating Fifty Years of Amateur Astronomy

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Meeting:

May 10, 2008

Main Feature:

Astronomy Day Outreach

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

Cassini & Huygens Saturn Mission

Our May 10 meeting is a combined meeting, outreach and celebration of National Astronomy Day. Our program will be presented by James Butts, Solar System Ambassador for NASA/JPL. He will have videos highlighting the Cassini and Huygens Missions to Saturn, which have explored the great gaseous planet, its spectacular rings and its numerous moons. Also featured will be a program on the Stardust Mission, where cosmic history is being brought back to the earth for study. Everything in the universe is made of "stardust" so this is a very important program. There will be an observing outreach after the meeting.

Bring your scope and observe with us after the meeting!

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Calendar of Upcoming Events

May 3, Star Party, site "TBD"

May 10, "Astronomy Day" outreach & club meeting at the museum

May 23 - 26, RTMC, at Big Bear

June 14, "Moon Party" outreach at the museum

June 21, Club at the museum

Jne 27-29, Grandview star party

Upcoming Outreach Information

By Chris Clarke

Our May 10 meeting will feature a special presentation and telescope viewing to promote National Astronomy Day. Our program will be presented by James Butts, Solar System Ambassador for NASA/JPL. He will have videos highlighting the Cassini and Huygens Missions to Saturn, which have explored the great gaseous planet, its spectacular rings and its numerous moons. Also featured will be a program on the Stardust Mission, where cosmic history is being brought back to the earth for study.

Following the programs, a free raffle will be conducted and then telescopic viewing of Saturn and the moon will be offered. The general public is being invited to participate and this will be one of our outreach events for the Museum.

To excite our visitors, be sure to bring a telescope down to share the magnificent views of the first-quarter moon and the tightly-tilted rings of Saturn!

Post meeting observing and public outreaches are great ways to introduce people to astronomy. We can help dispel myths and give good advice on how to get them started, even if they are on a restricted budget. Come and share your knowledge and experience.

Editor's Message

By Jim Sommer

At last month's meeting, our own Martin Carey and Chris Clarke presented an excellent Powerpoint program on some of the deep sky wonders available to us this spring. One of the areas mentioned was that in and around Ursa Major. Now if you've read your May issue of Sky And Telescope carefully, you will have noted Sue French's article on "The Immortal Beast (AKA Ursa Major). There are many wonderful DSO targets available to us. Many are clearly visible in 3" scopes. The nights are warmer now so let's all get out and observe even if it's just for an hour.

Star light, star bright,
First star I see tonight.
I wish I may,
I wish I might,
Have some good seeing
and descent transparancy for a change!

Consider, if you will, the plight of our poor brother and sister amateurs on the east coast. NEAF is now over and with all the new stuff that was bought it's doubtful that the New Equipment Curse will wear off any time before next July or August.

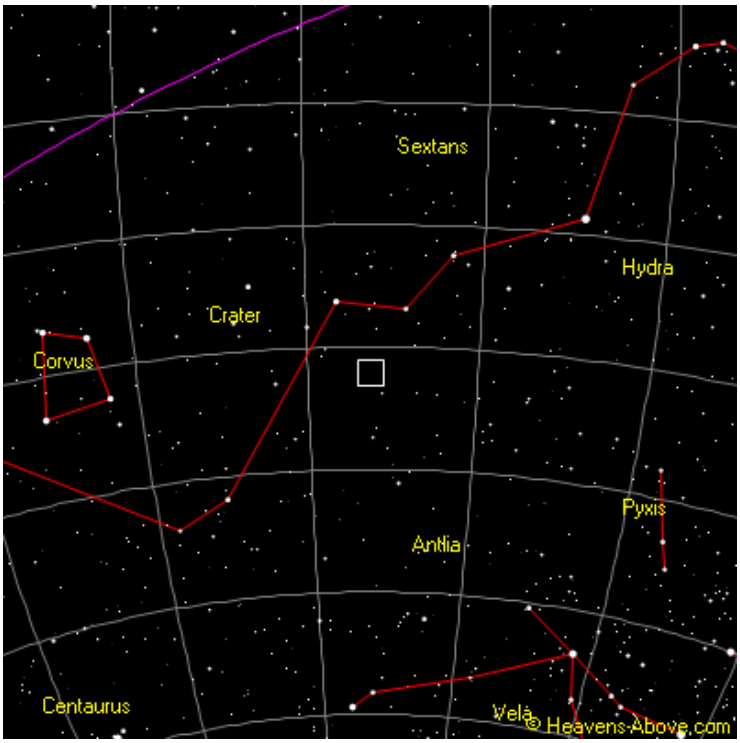
(cont.)

The Observer is your newsletter. But it's also a sort of forum where you can report on your observing experiences, or on a new observing site. You can advertise equipment wanted or for sale. If you want to report on your new Ethos eyepiece you can do it here. Want to tell us how deep you can go with your mega-light bucket? This is the place.

No, you don't have to be an experienced writer. Just e-mail me [k75jim@aol.com] with your article or ad. But... be sure to put SBVAA first in the "Subject Line." If you don't it will get dumped as spam.

Oh yes, if you have taken some astrophotos recently and would like to share them send them to me along with the basic data (scope, camera, exposure time and location).

Clear, dark skies!



Comet C/2007 W1 Boattini is now crusing the skies just above the southern horizon. The above chart can help you start your search. I was able to pick it out in my SV102V refractor over the May 3 & 4 weekend at Joshua Tree. Boattini is reminiscent of Comet Holmes before it "bloomed." It is currently about mag 8.4. I believe it will require a fairly dark site in order to see it. It resembles a small but bright, dense planetary nebula. Check it out for yourself.

Hubble Photographs Dozens of Colliding Galaxies

A huge set of new Hubble Space Images show galactic collisions in action and the variety of peculiar forms that merging galaxies can take.

The series of 59 new photographs, released today on the 18th anniversary of the Hubble Space Telescope's launch, are the largest collection of Hubble images ever released together.

Galaxy mergers are now known to be more common than was previously thought. They were even more common in the early universe than they are today. The early universe was smaller, so galaxies were closer together and therefore more prone to smash-ups. Even apparently isolated galaxies can show signs of past mergers in their internal structure.

Our own Milky Way contains the debris of the many smaller galaxies it has brushed against and devoured in the past. And it hasn't stopped munching away at its neighbors: It is currently absorbing the Sagittarius dwarf elliptical galaxy.

(Article by Andrea Thompson for Space.com. For more information go to Space.com.)

“Arc to Arcturus”

Arcturus ranks as the fourth brightest star in the night sky overall, behind Sirius, Canopus and Alpha Centauri. In older astronomy books, it is actually ranked sixth behind Vega and Capella, but modern measurements have shown it to be a trifle brighter than those two stars.

As if it weren't already easy enough to find, there is another way of locating it. Simply remember the following mnemonic phrase, "Follow the arc to Arcturus." That means just this: look at the Big Dipper. Its handle is bent. Imagine extending a curve from the handle, a curve that is readily translated into a smooth arc. Continue that imaginary arc about the length of the Big Dipper and you will ultimately come to Arcturus. [Those who attended the April meeting will remember this.]

Fast for a big star

An interesting fact about Arcturus is that it appears to shift its "fixed" position in the sky much more rapidly than most of the other bright stars (the sole exception being Alpha Centauri).
Sir Edmund Halley was the first to discover this motion back in 1718. Arcturus appears to be whizzing through space at a speed of nearly 90 miles per second in the direction of the constellation Virgo. It appears to move toward Virgo by about one-degree (which is about twice the apparent width of a full moon) over a time span of about 1,500 years. We are thus very fortunate to live at a time when the distance separating Arcturus and our solar system is nearly at its minimum. It will continue to approach the Earth for several thousand years more, but then it will pass us as it continues to move toward Virgo and its distance from us will begin to steadily increase. Computations show that in approximately 500,000 years, it will probably have moved out as far as 800 light years away from us and likely will have faded completely from naked-eye visibility.
Arcturus has been estimated to be roughly 25 times the diameter of the sun — about 20 million miles. If we could shrink our sun down to the size of a baseball, Arcturus would be a ball just over 6 feet across. Its luminosity is about 115 times that of the Sun.

In his definitive three volume work "Burnham's Celestial Handbook," the late Robert Burnham, Jr. points out that with modern infrared recording devices, the heat received from Arcturus can be measured, and is found to " ... equal the heat of a single candle at a distance of about 5 miles."

Herdsman ... Kite ... or Ice Cream Cone?

The dots over the second o in Boötes mean that you should pronounce the vowels separately: Boo-OH-tes, not (as many people say), Boo-ties! It is a Greek word meaning a man who tends to a herd of cows, so why not refer to Bootes as the cowboy of the sky? Boötes was the son of the goddess Demeter. It is written that he was rewarded with a place in the sky for inventing the plow.

In the allegorical sky pictures of star atlases of a few hundred years ago, Boötes is usually pictured holding a large rod or staff. Boötes is supposedly chasing after Ursa Major, the Great Bear. This is why some legends refer to Boötes as "The Bear-guard." On our sky map Boötes resembles a narrow kite; Arcturus would be where the tail is attached. But it might also be envisioned as an ice-cream cone.

At the bottom of the cone shines Arcturus. Since it has an orange hue, we might say that the cone was holding orange sherbet, and perhaps somebody bit off the bottom of the cone allowing the last little glob (Arcturus) to dribble out.

(Article by Joe Rao, for Space.com. For more information, go to Space.com.)