

# aslc bulletin

# The Bulletin of The Astronomical Society of Las Cruces www.aslc-nm.org

December, 2004 - January, 2005

# Make Plans Now for ASLC Holiday Dinner

In lieu of a regular meeting for December, the ASLC will be holding a holiday dinner. We had a great time along with some wonderful food and fellowship last year, and I hope you'll be able to participate this year.

What: ASLC Holiday Dinner

Where: JW Flours Bakery on El Paseo When: Friday December 17th at 6:00pm Cost: \$12.00 (Children under 12: \$8.00)

The menu will include turkey, ham, mashed potatoes and gravy, a vegetable, dinner rolls, and a beverage. Judy and Bill of JW Flours did a fantastic job with the meal last year, so you won't want to miss it.



NGC2264 - The Christmas Tree Cluster (in Monoceros). Image by Jim Misti

During the meeting, we'll review the highlights of our year, introduce our 2005 Club Officers and conduct a drawing for lots of fun door prizes.

We need to give Judy a count of how many will attend by Monday the 13th of December. You can RSVP to me via email (sbarkes@comcast.net) or phone at (505) 647-8270. You can pay me via check or cash on the 17th at JW Flours.

Hope to see you there!!

- Steve Barkes

### **Upcoming ASLC Events**

Please see the ASLC website <aslc-nm.org> for more information

December 11 - Deep Sky Observing (Upham)
December 17 - ASLC Christmas Dinner
December 18 - MoonGaze (Int'l Delights Cafe)
January 2 - New Telescope Clinic (La Llarona Park)
January 8 - Deep Sky Observing (Upham)

### This Month's Bulletin

Holiday Dinner 1	
Meeting Highlights2	
Vote for Bulletin Name 2	
Observing Goals 3	}
Telescope Workshop 3	3
December Skies 4	ŀ
Dave's Imaging Corner 5	,
AstroNerds 5	,
Image Gallery 6	;



# Meeting Highlights

### **November Meeting:**

(information regarding last month's meeting was not submitted for publication)

**December Meeting:** ASLC Holiday Dinner at JW Flours Bakery (see story on page 1)

**November Beginner's Corner**: "Winter-time observing: how & why" - it's more than just throwing on a heavier coat! First, why do it? 'Cause we have more darkness, often better seeing, and some of the best celestial targets ever (look at all those bright winter stars!). How to enjoy observing in the cold? Be personally prepared - quality head-covering, gloves, layered clothing, insulated socks & footwear, hand-warmers (examples of all these were shown), hot drinks & snacks. Also have your equipment prepared & well-organized, and minimize your need to deal with small or loose hardware. While observing avoid touching metal with your skin, avoid breathing on eyepieces or other optics, and avoid your body heat getting into your scope's light path. Things like having a good observing chair and an observing buddy are nice, as well as having a pre-planned observing list. With all the moisture lately, some dew-control equipment could be real valuable. With proper care you can observe through-out the entire winter - give it a try!

Next Beginner's Corner: "a primer for observing gas giants", with an emphasis on Saturn.

# A New Name for Our Bulletin (part deux)

At the November ASLC meeting, it was decided that we would change the name of our bulletin, and that members would vote for the name they like the best. Please look at the names below and select <u>up to three</u> that you like the most. Your vote may be submitted via email (to rrichins@zianet.com), or by US Mail (send to Rich Richins, 3115 Sundown Rd, Las Cruces, NM 88011). To vote, you must be a member in good standing. Please be sure that your name is printed on your ballot. If you don't like any of the names, you can submit your own. If there's an overwhelming winner, we'll simply go with it. If not, we'll have a run-off election at the Christmas Dinner/Meeting. Votes must be received by December 15, 2004.

### Here (again) are the nominations...

News & Views Border Skies Southern New Mexico Nebula

Pluto Ponderer Clear Skies Deep Space Messenger

Chihuahuan Skies Enchanted Skies Outer Planet

Desert Stars Monthly Mirror The ASLC News Nebula

Evening Star Monthly Imager The Observatory

Daily Planet Telrad Tattler Guidestar
Southern Skies Eyepiece (Enchanted Eye?) Observer
Desert Skies Reflector Sun News

High Desert Observer Refractor Las Cruces Planet Press Las Cruces Stargazer Tracker ASLC Eye on the Sky

# Set an Observing Goal for 2005

One of the discussions during the November ASLC meeting centered on a desire by several club members to do more 'pure' observing. Astrophotography and telescope making are wonderful hobbies, but it is the time we actually spend behind the eyepiece that acquaints us best with our universe. As members of the Astronomical League, all ASLC members are eligible to earn observing certificates. Some can be earned with binoculars, others require modest telescopes, and of course some of the more difficult lists demand a telescope of appreciable aperture. A complete listing of the certificates and requirements can be found on the AL website.



Set a goal to earn at least one AL observing certificate during 2005

In order to facilitate members earning some of the more basic certificates, I will endeavor to list about 10 objects on the monthly Sky Map page. Beginning this month and running throughout 2005, I will list Messier objects in two categories, binocular and telescope. Simply view (and note) the listed objects each month on the proper form (also available on the AL website), and by the end of the year, you will have done all the observing necessary to earn your binocular and/or telescope Messier Certificate. Please note that telescope observers must view the telescope AND binocular objects.

We'll also try to identify around 10 lunar features each month at our MoonGazes so that by the end of 2005, participants will have enough observations to receive a Lunar Observing Certificate. December's MoonGaze Moon will be an 8-day-old moon, so this month's list will include: Mare Vaporum, Mare Crisium, Mare Ibrium, Mare Frigoris, Mons Piton, Montes Alps, Vallis Alpine, Sinus Medii, and the craters Albategnius, Autolycus, and Aristullus.

# Fall Telescope Making Workshop Wrap-up

I he Fall 2004 Telescope Makers Workshop has come & gone. Nils, Rich & Vince helped our builders complete seven projects over just two Saturdays in mid-November. This compressed-schedule workshop worked well, despite some cold weather and growling stomachs. This was aided by the advanced level of shop experience possessed by most of the participants this time. In particular Art Lucero, who won the free TMW entry

First light for the Carrasco's new scope included a thorough test by Teddy (right) and his sons (David and Xavier)

given away at the Renn Faire, enthusiastically built a furniture-quality scope adorned with custom airbrush artwork. All the builders were pleased with



Art Lucero and Ed Leake with their new scopes at the November 20 MoonGaze

their results, and I saw four of them later on at the Moongaze (the same evening we finished). Hopefully we will see some of these guys at some future observing events! All in all, a good ending to this year's ASLC educational opportunities....

- Nils Allen

# December Sky Map

Chart shows positions of objects at about 8 pm for early December, about 7 pm for late December and about 6 pm for early January



Dec. 12



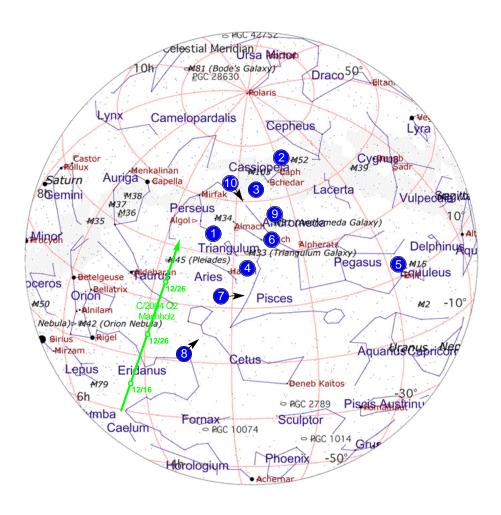
Dec. 18



Dec. 26



Jan. 02



Mars



In Libra Mag. 1.7 Rises about 4 am

#### **Jupiter**



In Virgo Mag. -1.8 Rises about 1 am

#### Saturn



In Gemini Mag. -0.1 Rises about 7 pm

## **Astronomy Calendar**

Dates are MST. Please see the ASLC website <aslc-nm.org> for more information

December 13 Geminid Meteor Shower

December 14 Chloe Occultation

December 21 Winter Solstice

December 22 Ursid Meteor Shower

January 3 Quadratids Meteor Shower

January 13 Saturn at Opposition

### **Comet Graces December Sky**

Be sure to look for the brightening comet, C/2004 Q2 Machholz. The comet starts the month in Eridanus and moves through Taurus as the month progresses



## **December-January Messier Tour**

### **Binocular Objects**

- 1 )M34 (Open Cluster)
- 2) M52 (Open Cluster)
- 3) M103 (Open Cluster)
- 4) M33 (Triangulum Galaxy)
- 5) M15 (Globular Cluster)

### **Telescope Objects**

- 6) M32 (Dwarf Galaxy)
- 7) M74 (Spiral Galaxy)
- 8) M77 (Spiral Galaxy)
- 9) M110 (Elliptical Galaxy)
- 10) M76 (Little Dumbbell Nebula)

# Dave's Astrophotography Corner

Rich (our new editor) asked me to contribute to the ASLC newsletter with a monthly image and related article on some aspect of astrophotography. This is installment #1 and I'm hoping that most of you will find it interesting. As this evolves, I'm hoping to get feedback on what people would like to see covered, so drop me an email if there are specific topics of interest.

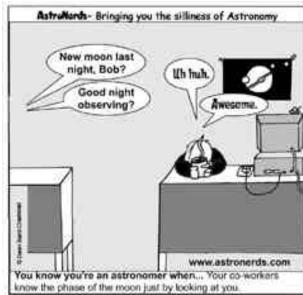
### This Month - The Double Cluster in Perseus



Open clusters are among the simplest DSOs to image because they're typically bright and often fairly large. This reduces the added difficulty of really long exposures and high magnification. Any film or digital camera with at least a 30 second exposure capability can be used for bright clusters and a small refractor or a medium to long focal length camera lens will often be adequate for a good composition. For longer focal length lenses and small telescopes, you'll also need a tracking equatorial or wedge mount with an adequate polar alignment. The longer the focal length, the more critical the accuracy of your mount's tracking and polar alignment.

Exposure time can vary widely and depends upon the magnitude, f-number, and desired depth of the image. I generally try to strike a balance between the intensity of the cluster and that of the background stars. My personal preference is a result that's similar to the same view through a small telescope under a dark sky.

This cluster pair is currently high in the Northeast after sunset and I was able to capture the image from my back-yard in Mesilla using a Canon 300D, TeleVue 85mm APO, and an IDAS LPS (Light Pollution Suppression) filter. I limited exposures to thirty seconds to keep the tracking accuracy requirement low and used my CG-5 mount because it's easy to setup, polar align, and tear down. The image is comprised of 10x30sec ISO 400 exposures stacked and summed with a 10x30sec ISO 800 stack. Stacking allows you to average out the noise in an image and improve the contrast. I processed the result in Photoshop by setting the black/white points, boosting the mid-range intensity curve, and applying a light unsharp mask filter. I'll talk more about these techniques in future articles.



(Comic provided free of charge by www.astronerds.com)

#### MEMBERSHIP in the ASTRONOMICAL SOCIETY of LAS CRUCES (ASLC) offers...

Frequent observing sessions and parties; Opportunities to work on club and public educational projects; The ASLC Bulletin, our monthly newsletter; Membership in The Astronomical League, including the quarterly A.L. Reflector, the newsletter of The Astronomical League. ASLC members are also entitled to a \$10 club discount on subscriptions to Sky and Telescope magazine (discount rate is \$33/year). Dues are \$35 per year. For those who opt to receive the ASLC Bulletin electronically, a \$5 discount applies. Send dues, payable to A.S.L.C. with application form or a note to:

Treasurer ASLC, PO Box 921, Las Cruces, NM 88004

Sky &Tel. subscribers MUST submit their renewal through the Society Treasurer for the special club rate. To avoid a lapse in delivery, this must be done when S&T sends their reminder, 4 months in advance.

#### ASLC OFFICERS 2004 Board@aslc-nm.org

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# ASLC IMAGE GALLERY





ond images acquired with 300D through 10" LX10.

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ASLC - Sharing the Universe With Our Community for Over 50 Years