



2010 Mulberry Mountain Star Party

The [Arkansas/Oklahoma Astronomical Society](#) is proud to announce their third annual **2010 Mulberry Mountain Star Party**, to be held on June 11th, 12th and 13th, 2010. Once again, this year's event will take place at [Mulberry Mountain Lodging & Events](#), which is a 650-acre facility located 16 miles north of Interstate 40, on Arkansas Hwy 23, near the city of Ozark, Arkansas. The facility boasts some of "The Darkest Skies in Arkansas," at GPS coordinates N 35° 42' 36": W 93° 47' 44".



Mulberry Mountain offers cabins, pull-through RV sites and improved tent campsites with water, electricity & showers. Virtually unlimited primitive campsites are also available. Contact [Mulberry Mountain Lodging & Events](#) by phone at **(866) 667-1919** or by e-mail at mulberrymountain@aol.com for lodging information and reservations. Click on the map to display

this location in [Google Maps](#).

AOAS plans to set up a Public Observation Area on the south side of the resort on Friday and Saturday evenings. All scopes are welcome, and encouraged. Amateurs who wish to camp in the Public Observation Area may do so, to remain near their equipment. This area only supports "primitive" camping (no sewer hookups, limited water & electric.)

A "Swap Meet" will take place Saturday afternoon in the Events Tent, where anyone will be able to buy, sell, or trade any astronomical items on Saturday.



Kenny Dickerson Photo

2010 Mulberry Mountain Star Party

Registration

A Registration Booth will be set up in the Public Observation Area, adjacent to the Events Tent. For 2010, AOAS requires a \$10.00 Registration Fee, for all attendees 18 years old or older. Children under 18 years old are free.

This will help AOAS offset Star Party expenses.

IDA – Arkansas Section Annual Business Meeting

The **Arkansas Section of the International Dark Sky Association** will hold their Annual Business Meeting at 1:00 pm on Saturday afternoon. This event is free and open to all members of the public and attendees of the MMSp. For more information on this event and the IDA-AR please contact Arkansas Section Leader Jim Fisher at DarkSkyArkansas@gmail.com or 501-366-0948.

Speaker Line-Up

This year's Star Party includes two excellent speakers! Speakers will be making their presentations in the Events Tent, which will be located on the east side of the Public Observation Area, on Saturday, June 12th, at times indicated.

Norman D. Walker (Norm) is the **Arkansas state Director of the Mutual UFO Network (MUFON)**. His Presentation will begin about 2:30 PM. The presentation will cover how to document and who to contact if we witness something unusual in the night sky. Since our government no longer documents strange sightings, this group is the largest in the world that gathers information on unusual events in the skies. MUFON investigates reported events and logs acquired data into their national data base, which they can use and study to try to find the truth. Their first rule is to find all reasonable explanations of the event. For the most part, they find that over 90 percent of the reported events can be ruled out as earthly phenomenon or military in nature. However, there are some events that remain unknown or unexplainable.

Norm's e-mail is: ndwvitality@earthlink.net Website: www.arkansasmufon.org.



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Pablo Rosell, is a graduate student in Mathematics, at the University of Arkansas, Fayetteville, and is also an outstanding Astro-Imager and Amateur Astronomer. Pablo is an expert at acquiring celestial images with modest equipment, such as a 66mm APO Retractor and Meade DSI Pro CCD Camera on a Meade LXDMount. Pablo will be presenting a two-part mini-course in beginning Astro-Imaging.

4:00 PM – Astro-Imaging Part #1: Lecture

I. Introduction

- Advantage of equatorial vs. Alt/Az mounts for photography.
- Polar aligning:
 - Leveling the mount.
 - Polar align: The more accurate the better. (No way to stress enough on this topic).
 - Intro to drift aligning
- Guiding vs. Tracking and Autoguiding
- Intro to CCDs (mono, color or "one shot", etc...)

II. Tweaking or optimizing your equipment

- Tuning your mount
 - Getting rid of backlash and keeping the worm running soft.
 - Periodic error. PEC if tracking. PEC or not if guiding?
- Guiding:
 - Using a guidescope -- pros/cons
 - Using an off-axis adapter pros/cons
 - Flexure. Identifying and getting rid of it (as much as possible).

III. Getting a picture

- Why to stack? or increasing SNR.
- Why is a stack of 4 frames @ 10min better than 40 frames @ 1min
- Darks, Flats and Bias frames.
- WYSINWYG (What you see is NOT what you get) an intro to post processing. We'll show at least a fast example on the original stacked image vs. some simple histogram stretching.

IV. Software

- Acquiring Data(Camera specific or Nebulosity, Maxim, etc...)
- Stacking (Free: DeepSkyStacker, or ...)
- Autoguiding (Free: PHD Guiding, or ...)
- Mount-to-PC communication (ASCOM)
- Post processing (Photoshop and PixInsight (top notch). GIMP?)

After Dark – Astro-Imaging Part 2: Practice Session Free software will be available for installation by attendees that have a computer with them, or copied to attendee supplied media for later installation.

- Before this session Pablo can help install PHD, DeepSkyStacker and ASCOM.
- Pablo will also offer help in correcting backlash, and will start showing how his mount is working so students can get a feel for what can be achieved even with an LXDMount.
- Drift Aligning Demonstration
- Autoguiding Demonstration and help getting started.
- Imaging Demonstration.

Note: A \$20 fee would be charged to those attending the practice session with their equipment. A \$10 fee will be charged for those auditing the course (attending w/o equipment.)

For more information, contact

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