



May 26-30, 2016

Camp Oakes

Big Bear,

California

2016 - FUN WITH OUR SUN!

Welcome to the 48th RTMC Astronomy Expo!

At this year's Expo, we continue our tradition of celebrating amateur astronomy in its many facets, from beginner to advanced researchers and imagers. If you like to camp under the stars, hear great science lectures, see our vendors with the latest in astro-goodies and look through amazing telescopes, then come and join us!

This year our keynote speaker is Tamitha Mulligan Skov, a solar astronomer and "space weather forecaster." She hosts the online TV show, "Spaceweather.tv," telling us what is happening on our star and how it will affect us on earth. Dr. Skov is an engaging speaker and active solar scientist, so her presentation is a must see.

Our theme this year is "Fun With Our Sun," celebrating the observation and science of our nearest star. We will have speakers on solar science and solar telescopes to view the sun in various wavelengths. Our Beginners' Corner activities will involve the family in safe solar observation and, of course, we have our Beginners' Star Party at night.

Our skies this year are putting on a real planetary show, with Mars close to a very favorable opposition. Jupiter will be in the western sky and Saturn will show off its wide-open rings, rising just after 8:00pm. The moon rises later, so we'll also enjoy deep sky viewing.

At night, we've expanded the star party activities to include both the upper and lower telescope fields. If you have a telescope of any size, bring it! If you are having problems with your telescope, bring it anyway; our "Telescope Urgent Care" booth will have knowledgeable amateurs who may be able to help.

RTMC Astronomy Expo offers talks and activities at Beginners' Corner, Merit Awards for telescope-making, an Astro-Imaging Exhibition, an Imaging Workshop and activities for families with kids. Also this year, we are letting all kids, ages 0 to 17, enter the Expo for **free**. Fun things include the swimming pool, the zip line (extra fee), canoeing on the lake, the rock climbing wall, archery, and other activities. Don't forget the Swap Meet on Saturday & Sunday and see what everyone's selling.

I'm Martin Carey, the new RTMC President and I have been attending RTMC since 1978. My professional work is in special education as a school psychologist and I've been promoting our hobby as an amateur astronomer since 1970. Sharing the sky with everyone is a great joy. So on behalf of the RTMC Board, I invite you to come on up to the mountain!

Martin L. Carey

President, RTMC



Above: Charles Morris, the 2013 "Solar System" winner.

Astro Imaging Exhibition

We would love to feature your work as part of the Astro-Imaging Contest and Exhibition. You are highly encouraged to bring a print of a favorite image you have produced since last year's conference in any or all of five categories:

- Solar System,
- Deep Sky,
- Eclipses/Transits,
- Meteors and Atmospheric Effects,
- Other astronomically related images.

Pictures must be unframed and from 8x10 to 16 x 20 (if matted, do not exceed 16 x 20 mat). Register from Friday, 11 am until Saturday, 10 am in the Pavilion (in front of the main dining hall). Entry and contest rules are at www.rtmcastronomyexpo.org. RTMC AE attendees will enjoy your work and have an opportunity to vote for their favorites. Winners will be named Saturday night.

Presenters Needed

RTMC Astronomy Expo is well noted for its programs. We have three venues, all going all weekend, so there is plenty to see and hear.

We are looking for talks related to this year's theme: ***Fun with our Sun*** in addition to any other aspect of amateur or professional astronomy. As usual, we invite you to present information about telescope making, equipment, visual observing, imaging, outreach, or any and all other aspects of our hobby. If you would like to make a presentation, lead a workshop, chair a panel, or reserve time for a special interest group meeting, please send an abstract, audio-visual requirements & a brief (50 words) biography by April 15th to:

Charles Morris at program@rtmcastronomyexpo.org.

Telescope Makers

In 1969, the tradition started with the "Telescope Makers Conference" at Riverside City College. All these years later, RTMC Astronomy Expo is still a great Telescope Maker's Conference!

If you have designed a telescope, bring it so others can see your innovative designs or craftsmanship in telescope making. Be sure to register for the Merit Awards program. All entries must be completed (not "Under Construction") and must be located on the Telescope Field, Telescope Alley, or Meadow. Judging is on Friday afternoon and Saturday morning with Merit Awards named Saturday evening.

Show and Tell

If you have an image, movie, or short PowerPoint that you would like to share with the astro-crowd, please bring it to the main hall on Friday night after dinner. At "Show and Tell" you can do a little informal bragging on what you have done without making too big a deal of it. Simply bring the file on a separate CD or thumb drive, clearly labeled with your name and which files you want shown, to the AV volunteers in front. It really helps if you have set the separate images into a short presentation (PowerPoint or other simple viewer), rather than relying on the AV folks to find the separate files. Be ready to say a few words to the audience. Limit yourself to five minutes, please!

Beginner's Corner

Come check out the fun things going on for all ages!

You can hear talks about The Basic Telescopes, Observing Techniques, Eyepiece Basics, Overview of Astronomy, Messier Objects, Understanding Star Charts, and so much more!

And have you ever walked the entire Solar System? Well you can (sort of). Meet at the front of Bose Lodge during the day for a very informative and fun "walk" thru the Solar System.

You can also get a guided Tour of the Constellations at night in the Amphitheater next to Bose Lodge.

Family Fun

Camp Oakes will have a schedule of various activities offered by the Camp. Everyone may enjoy the swimming pool, lake canoes, archery, mountain biking (your own bike), climbing tower, catch & release fishing, and zip line (fee charged by the camp).



The schedule listing times and locations for these activities will be posted at the Main Hall, Bose Hall and the Information Booth. Be sure to check it out when you arrive so you don't miss out on anything. See you there!

Nightfall

Nightfall is still going strong! Come join the fun at the Palm Canyon Resort in Borrego Springs, CA.

This year it will be Oct. 27 – 30, 2016. Make your reservations now at: <http://www.palmcanyonrvresort.com/>

Borrego Springs is the second international IDA dark sky community. See www.nightfallstarparty.com for all the details. Sponsored by: The Riverside Astronomical Society.

AstroPhotography Workshop

David Ault is coming in from Texas to share his expertise in astro imaging with the RTMC attendees.

A senior electrical engineer at IBM, Dave is more known among the viewers of *The Astro Imaging Channel* as somebody at home with imaging equipment and software and, more importantly, Dave is somebody who can help other people understand it all. He has been an amateur astronomer for more than twenty-five years, with the last five particularly in imaging. He plans to talk about how to maximize your data, showing the fundamentals of image processing concepts. He will work through the steps of turning acquired data into a linear image, and then turning that linear data into a masterpiece. He is especially knowledgeable about PixInsight, and will show off a number of processes and scripts in the Pixinsight Tool Box. Even if you do not use PixInsight as your main tool, you will pick up lots of useful ideas. And if you are a Pixi fan, you need to be there.

Dave has developed a number of advanced techniques, and has shared his expertise in small workshops and on his website trappedphotons.com. Whether you are fairly advanced, or just dabbling, you will find value in this workshop. Also, you will get to spend the day with other amateur imagers, swapping stories, and sharing hints.

This is a premium workshop, available to no more than the first 50 to register. The workshop will be from 10:00 to 4:00 Sunday, with breaks for lunch. Through the years, these RTMC AE Premium Astrophoto Workshops have been over-booked by early April, so be sure to sign up early!

Swap meet

This year we will again be having our swap meet on BOTH Saturday and Sunday mornings. So dig deep in those closets, garages, and storage units for all that extra stuff you don't use. Sell it, make some money and gain some space - for some new stuff!



The Trifid Nebula

David Ault



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A proud supporter of the RTMC for over 40 years!

Location

Longitude 116° 45' 21" West

Latitude 34° 13' 45" North

Altitude 7228 feet (2203 meters)

Moonrise (PDT); Moonset in daylight

Thurs May 26: Moonset 9:53am, Moonrise 11:50pm

Fri, May 27: Moonset 10:51am

Sat, May 28: Moonrise 12:32am, Moonset 11:52am

Sun, May 29: Moonrise 1:12am, Moonset 12:54pm

Mon, May 30: Moonrise 1:51am, Moonset 1:59pm

Contact Information

Registration: registrar@rtmcastronomyexpo.org

Vendor Chairman: vendor@rtmcastronomyexpo.org

Merit Awards: rozer@pacbell.net

Speaker Chairman:

program@rtmcastronomyexpo.org



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NAME _____ Phone# _____

Note: Vendors, please use the form at <http://www.rtmcastronomyexpo.org/vendors.htm>

ADDRESS _____

CITY _____ STATE _____ ZIP _____

EMAIL ADDRESS: _____

TO REGISTER

1. Complete the registration form.
2. Make checks payable to:

Riverside Telescope Makers Conference.

3. Mail your Registration to:

**Riverside Telescope Makers Conference
P.O. Box 20243
Riverside, CA 92516**



OR

You may use

PayPal to register online at:

www.rtmcastronomyexpo.org/registration.html

Pre-registration closes May 7th

**Do not mail or use PayPal/website
registration after May 7, 2016**

Your request will not be processed.

You may register on-site when you arrive.

Refunds: Notify the conference in writing by June 1.

PayPal Service Fees are not refundable.

No refunds for weather-related causes.

Weekend Admission (Includes Up to Four Nights Camping)	Cost Before May 7	Cost After May 7	Times # of People	Equals Amount
Adults, per person	\$42	\$50		
Children Ages 0 to 17	Free	Free		
Dorms— Adults (does not include admission)	\$16	\$16		
Dorms— ages 0-17	Free	Free		

DAY USE ONLY No Camping or Dorms Included in Price	Day Use Cost	After May 7	Times # of People	Equals Amount
Adults, per person	\$25/Day	\$30/day		
Children Ages 0 to 17	Free	Free		

David Ault Astro-Imaging Workshop \$50 per person (In addition to Camping or Day Use Admission)	Times # of People _____	
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CAR	How many vehicles? _____
PASSES	How many people in each vehicle? _____

We reserve the right to refuse any application.

TOTAL	
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