



**May 25-29, 2017**

**Camp Oakes**

**Big Bear,**

**California**

## **2017 - Year of the Eclipse!**

Welcome to the 49<sup>th</sup> RTMC Astronomy Expo! RTMC is dedicated to making the great hobby of astronomy fresh and challenging to everyone, from young beginners to researchers. Some great presentations are scheduled with a wide range of topics on telescope-making, astronomical research, and this year's great event, the total solar eclipse on August 21<sup>st</sup>. You won't want to miss that spectacular sight and our Expo programs will help you get ready.

You may contribute to RTMC by bringing a telescope to share with guests or even make a presentation about something you have made or studied. We will have Merit Awards again, so bring that telescope or observing device you made and show it off. Your contributions strengthen our hobby.

Our 2017 keynote speaker will be Mr. Eclipse, Fred Espenak, retired astrophysicist from NASA's Goddard Space Flight Center. He is an active eclipse observer and prolific author of many works that have become the references of choice for eclipse predictions and observation. You can see his website at [MrEclipse.com](http://MrEclipse.com). Other presenters cover not only solar observation, but many other aspects of astronomy as well. As always, you can count on the Beginners' Corner's presentations and activities, including the Beginners' Star Party, to assist the astronomer just starting out.

We will hold our star party on the upper Telescope Field again this year, so we hope you will add your telescope to the fun. Last year, it was gratifying to see so many sizes and types of telescopes, from 2" to 20", all pointed at the Big Bear Sky. There are some power outlets available for your equipment, although you will likely need to bring your own extension cord. The RTMC star party is a great place to meet many interesting people, talk about our universe, and look through a variety of instruments. Be sure to check out our vendors, all along the pathways and in the Big Tent. We have some exciting new vendors as well as others who have returned. The Swap Meet will be held Saturday and Sunday, so come and see what others are selling.

We hope for clear skies, but come prepared for all kinds of weather. Remember, when you see clouds down the mountain, it is often clear in Big Bear! Check out a Big Bear weather site or webcam first. RTMC is a family friendly event, so kids ages 0-17 enter for free. College students with ID can enter at half-price. Camp Oakes offers many outdoor activities, including swimming, canoeing, mountain-biking, hiking, the zipline, archery, and more. Our Astronomy Expo is a unique gathering of amateurs, speakers, equipment, and excitement. We strive to keep making RTMC Expo better, and we welcome you to come on up the mountain and join us!

Martin Carey  
President, RTMC Astronomy Expo



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,
- General (astronomically related).

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](http://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: ***The Day the Sun Disappears*** 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: [program@rtmcastronomyexpo.org](mailto:program@rtmcastronomyexpo.org)**

## 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.

## Telescope Makers, Merit Awards

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!

## 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!



## 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!

## 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. 19-22, 2017. Be sure to make your reservations now as the hotel and campground sells out quickly! Reservations can be made at: <http://www.palmcanyonrvresort.com/>

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

## Telescope Viewing

For those of you who venture up to the telescope field Friday and Saturday night, we'll have various telescopes for you to look thru at the night sky. We'll also announce and direct your attention to any possible iridium flares and ISS passes that may happen on those evenings. If you've never witnessed an iridium flare or watched the International Space Station fly by, you make plans to stop by and see us up on the telescope field.

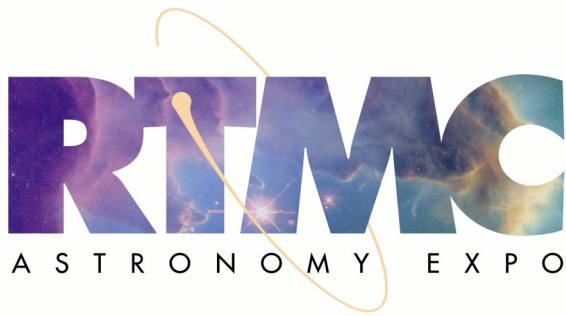
## AstroPhotography Workshop

We are back with another outstanding imager presenting an extensive workshop on equipment, acquisition & processing celestial images. Josh Smith, from the Astro Imaging Channel, will be coming from Florida to share his expertise.



As an astro photographer, Josh enjoys diving deep into every aspect of the hobby, pushing processing techniques to the limits & finding new ways to bring out the faint stuff. As an engineer, his heart is always in modifying his gear to get every last ounce of performance possible. If you have seen him on the Astro Imaging Channel, you know he has an easy style, responding to the beginner to advanced. He is one of the founders of The Astro Imaging Channel, a weekly class & web space devoted to sharing all things astrophotography with the broader community including processing tutorials, hardware reviews, software intros, and more. You can find out more about Josh, see his gallery, and listen to a few of his tutorials on The Astro Imaging Channel on Google+ or at <https://www.catchingthecosmos.com/>

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!



PRESORTED  
STANDARD  
U.S. POSTAGE

**PAID**

PERMIT NO. 41

#### **Location**

Longitude 116° 45' 21" West

Latitude 34° 13' 45" North

Altitude 7228 feet (2203 meters)

#### **Moonrise (PDT); Moonset in daylight**

Thurs May 25: Rise, 4:49AM Set, 6:53PM

Fri, May 26: Rise, 5:42AM Set, 8:01PM

Sat, May 27: Rise, 6:40AM Set, 9:05PM

Sun, May 28: Rise, 7:42AM Set, 10:02PM

#### **Contact Information**

Registration: [registrar@rtmcastronomyexpo.org](mailto:registrar@rtmcastronomyexpo.org)

Vendor Chairman: [vendor@rtmcastronomyexpo.org](mailto:vendor@rtmcastronomyexpo.org)

Merit Awards: [rozer@pacbell.net](mailto:rozer@pacbell.net)

Speaker Chairman:

[program@rtmcastronomyexpo.org](mailto:program@rtmcastronomyexpo.org)

## **RTMC Sponsors**

A proud supporter of the RTMC for over 40





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](http://www.rtmcastronomyexpo.org/registration.html)

**Pre-registration closes May 7th**

**Do not mail or use PayPal/website  
registration after May 7, 2017**

**Your request will not be processed.**

**You may register on-site when you arrive.**

Refunds: Notify the conference via email by May 23rd.

PayPal Service Fees are not refundable.

**No refunds for weather-related causes.**

<b>Weekend Admission</b> (Includes Up to Four Nights Camping)	<b>Cost Before May 7</b>	<b>Cost After May 7</b>	<b>Times # of People</b>	<b>Equals Amount</b>
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		

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


<b>Astro-Imaging Workshop</b> \$50 per person (In addition to Camping or Day Use Admission)	Times # of People _____	
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<b>CAR PASSES</b>	How many vehicles? _____ How many people in each vehicle? _____
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*We reserve the right to refuse any application.*

**TOTAL**