



May 24-28, 2018
Thursday—Monday
Camp Oakes
Big Bear,
California

2018 - Celebrating 50 Years!

Welcome to the 50th RTMC Astronomy Expo!

The Riverside Telescope Makers Conference has gathered amateur astronomers from far and near for half a century, and it's time to celebrate! This year we will share the personalities, the telescopes, the triumphs and failures that shaped us. If you have many years with RTMC, we want to hear your story. If you are new, join the festivities! This is our big 50th bash, a year to remember. Stay tuned on our website, <http://rtmcastronomyexpo.org/> for news about our exciting speakers and events.

RTMC is the place where we encourage every aspect of astronomy with science lectures, observing day and night with fellow amateurs and numerous telescopes, and excellent vendors bringing the latest astronomy gear. At RTMC you're not stuck in a conference center, but can roam free in the mountain air seeing all that our expo has to offer.

RTMC is the place for all you telescope makers, so if you built it, bring it and show us. Likewise, bring your best astrophotos to share. We want to recognize your best efforts with our telescope-maker Merit Awards and Astrophotography Competition. For the serious imagers, there will be an imaging workshop (extra fee) held Sunday from 9am – 3pm. If you'd like to contribute to the program, whether by speaking on a subject you know or showing something you have done, be sure to contact us.

Bring your telescope to the telescope field for our nightly star party. There will be a variety of telescopes for those that don't have a telescope to see the various wonders of the night sky. There will be a gibbous moon, with Jupiter and Saturn's wide open rings. Don't forget to bring your battery pack to keep your telescope & equipment charged while viewing.

All kids come in for free and college students enter at half price (with college I.D.). We have events for the whole family, including hikes, mountain biking (bring your own bike), swimming, archery, a zip line (extra fee), and canoeing. Sunday afternoon there will a special kids' telescope activity that ends with ice cream sundaes.

Of course, we have the early morning frenzy of the Swap Meet on Saturday & Sunday. Strange and wonderful discoveries are found there.

Come on up to the mountain and see for yourself!

Martin Carey, RTMC President



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

Astro Imaging 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 tent (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.

Telescope Makers, Merit Awards

In 1969, the tradition started with the "Telescope Makers Conference" at Riverside City College. 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 the Meadow. Judging is on Friday afternoon and Saturday morning with Merit Awards named Saturday evening.

Presenters Needed

RTMC Astronomy Expo is well noted for its programs. We have three venues, going all weekend, so there is plenty to see and hear. We are looking for talks related to this year's theme: *50 Years of Astronomy & Telescopes*, 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 2nd** to:

Charles Morris at program@rtmcastronomyexpo.org.

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.

Telescope Viewing

For those of you who venture up to the telescope field Friday and Saturday night, we'll have various telescope stations set up 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, make plans to stop by and see us up on the telescope field.

Nightfall

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

Dates: 11/1/18 - 11/4/18

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 for all the details.

Sponsored by: The Riverside Astronomical Society.

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!



Important Camp information!

The camp has informed us that **NO DOGS will be allowed at Camp Oakes.** This is liability issue for them. Unless your dog is a licensed guide/therapy dog, please leave your dog at home.

Please be aware that there is NO water available to fill up your RV with. Please make sure your water tanks are already filled before arriving. There is also NO electricity hook ups for RVs.

No camping is allowed in or near the Indian Village. It is for the Staff and Boy Scouts only. We appreciate your understanding in following the camp rules.

AstroPhotography Workshop



Bryan Cogdell is an astrophotographer & telescope expert with 18 years' experience in the consumer telescope industry. Bryan is currently Product Manager for astronomical telescope products at Meade Instruments. He specializes in "weekend warrior imaging" and is always traveling to the best dark skies. He has given night sky tours & astrophotography talks around the world, and has recently been a featured speaker at the Sequoia National Park Dark Sky Festival and the Northeast Astro-Imaging Conference. Bryan loves sharing his knowledge & enthusiasm with others. You can find some of his work here on stellarscapes.net.

What Counts in an Astrophoto?

Time is precious and when it comes to astrophotography, we usually only have a night or two in a given session to really collect those ancient photons from the night sky. So let's cut to the chase & get the best astrophotos possible with an overnight setup. I want to emphasize the actual data collection which is often taken for granted. Processing comes after actually capturing a worthwhile astrophoto! I've seen imagers meticulously drift align their mount for over an hour, spend time carefully leveling their tripod, essentially agonizing over some of the finer details in their one-night setup for astro-imaging. But what do we really need to focus on? I will show you real-life examples with practical advise on imaging for those of us without a permanent observatory. Let's make the most of our astrophotography!



Swap meet

As usual, we'll 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!

Don't Forget . . .

We are at 7200+ feet in elevation, so be sure to drink plenty of water, use sunscreen and be prepared for various weather conditions. It can be cold, windy, snowing, hot, sunny, dry, etc.!

Bring layers to wear, a hat and a sense of adventure. We never know what Mother Nature will give us.



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 24: rise 2:15PM - set 2:00AM

Fri, May 25: rise 3:15AM - set 2:34AM

Sat, May 26: rise 5:14PM - set 3:07AM

Sun, May 27: rise 5:12PM - set 3:41AM

Contact Information

Registration: registrar@rtmcastronomyexpo.org

Vendor Chairman: vendor@rtmcastronomyexpo.org

Merit Awards: rozer@pacbell.net

Speaker Chairman:

program@rtmcastronomyexpo.org

<http://www.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: _____

**Expo dates are
Thurs. May 24th to Mon. 28th**

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 6th

**Do not mail or use PayPal/website
registration after May 6, 2018**

Your request will not be processed.

You may register on-site when you arrive.

Please remember, NO DOGS allowed. Thank you!

Refunds: Notify the conference via email by **May 20th**.

PayPal Service Fees are not refundable.

No refunds for weather-related causes.

Weekend Admission (Includes Up to Four Nights Camping)	Cost Before May 6	Cost After May 6	Times # of People	Equals Amount
Adults, per person	\$42	\$50		
Children Ages 0 to 17 Please note how many	Free	Free		
Dorms— Adults (does not include admission)	\$16	\$16		
Dorms— ages 0-17 Please note how many	Free	Free		
50th Anniv. T-shirt		Small		
Select size and quantity		Medium		
\$18 each, prepaid		Large		
Will be \$21 at the booth		X Large		
		XX Large		
		XXX Large		

DAY USE ONLY No Camping or Dorms Included in Price	Before May 6	After May 6	Times # of People	Equals Amount
Adults, per person	\$25/Day	\$30/day		
Children Ages 0 to 17	Free	Free		

Astro-Imaging Workshop \$50 per person (In addition to Camping or Day Use Admission)	Times # of People _____	
TOTAL		

CAR PASSES: How many vehicles: _____

How many people in each vehicle: _____

We reserve the right to refuse any application.