

2017 Presenters

“Manny” Antimisiaris is a research pilot and navigator at NASA’s Armstrong Flight Research Center, Edwards, CA. Currently he is one of the pilots of the highly modified Boeing 747SP that serves as the platform for the Stratospheric Observatory for Infrared Astronomy, or SOFIA, flying observatory. Antimisiaris first joined NASA as a Systems Safety Engineer. He earned a Bachelor of Arts in Psychology and Human Factors from Rutgers University, Newark, NJ, and has logged over 10,000 flight hours in various aircraft including the B-52, E-3 AWACS, DC-8, DC-9, 737, LR-45 and A-320.

Martin Carey is a school psychologist in San Bernardino, CA, and an amateur astronomer for nearly 50 years with many telescopes and misadventures. He spends his free time on research, writing, and dragging a 20-inch telescope all over the west. *Martin is RTMC’s Grand Poobah!*

David Dunham graduated from the University of California, Berkeley in 1964 and obtained a PhD in astronomy at Yale University in 1971. He has designed trajectories for several lunar (and beyond) space missions, working now part-time with KinetX-Aerospace, but he is best known here for his establishment of the grazing occultation program in 1962, and of the International Occultation Timing Association in 1975. He is married to Joan Bixby Dunham and has a son William.

Steve Edberg has been an amateur astronomer since his youth, both using and building telescopes, accessories, and his own observatory. Steve’s interests range from meteors in the near sky to quasars in the deep sky and he has traveled the world to solar eclipses and other astronomical events. Steve was a founding member of the Board of Directors of the Riverside Telescope Makers Conference, Inc. starting 1988, and Grand Poobah (Executive Director) from 1993 to 2014.

Alan B. Gorski became interested in astronomy in 1967 while in the 6th grade after looking through a classmate’s 3” f/10 Edmund Newtonian reflector. In 1979, he was the Saturday night keynote speaker at RTMC. His talk described how to increase the contrast and color saturation of color slides of deep sky objects and aurora using a slide duplicator.

Ken Graun writes beginning astronomy books and star charts.

Joe Jakoby has been attending RTMC since 1976. Growing up and living in the Chicago area, he started mirror making in the basement of the Adler Planetarium. Now retired, he devotes his time to sharing astronomy with others and is dusting off his optical equipment with plans to make more telescopes.

Mario De Leo-Winkler is an postdoctoral researcher and project manager for the NASA MIRO FIELDS Program at UC Riverside. His research interests are methods in science education and public outreach, and gravitational lensing of primordial galaxies. Mario has a Ph.D. in astrophysics by the National Autonomous University of Mexico, and has studied in France and the Vatican.

Paul Livio, a former electrical-optical engineer in aerospace, now teaches physics and astronomy at Copper Mountain College. He has been an amateur astronomer and telescope maker for 40 years.

Alex McConahay, a former schoolteacher and principal, has been an amateur astronomer and member of the Riverside Astronomical Society for over fifteen years. His interests include outreach, imaging, and visual observing.

Charles Morris is the Program Chair and the Astro Imaging Contest Chair for the Expo. Although better known for his work on comets, he first joined the America Association of Variable Star Observers in 1968. He was on the Council of the AAVSO in the early 1980’s. The talk he is giving was developed and is normally presented by the Director of the AAVSO, Dr. Stella Kalka.

Bill Patton is a retired MD from Redlands and celebrates nearly 60 years looking at the skies. He is a long-time source of information for beginners in the Riverside Astronomical Society and elsewhere and particularly enjoys showing the wonders of the sky to others.

KEYNOTE SPEAKER

Dr. Fred Espenak

“Mr. Eclipse”

Saturday Night

Main Hall after the Announcements & Awards

Fred Espenak’s career as a NASA astrophysicist at Goddard Space Flight Center spans more than 30 years. His primary research involves the infrared spectroscopy of planetary atmospheres although he is better known as NASA’s eclipse expert Mr. Eclipse. Espenak is currently a scientist emeritus at Goddard and he maintains NASA’s official eclipse web site (eclipse.gsfc.nasa.gov) as well as his personal web site on eclipse photography (www.mreclipse.com). Fred has published numerous books and articles of eclipse predictions including the NASA Eclipse Bulletins series, and he is the co-author of the popular book *Totality: Eclipses of the Sun*. His magnum opus, the *Five Millennium Canon of Solar Eclipses*, includes a map of every solar eclipse occurring between 2000 BC and AD 3000.

Espenak’s interest in eclipses was first sparked after witnessing a total solar eclipse in 1970. Since then, he has participated in 34 eclipse expeditions around the world including Antarctica. His eclipse photographs have appeared in both national and international publications, and he has lectured extensively on the Sun, eclipses and photography. Fred now lives in rural Arizona, where he spends most clear nights losing sleep and photographing the stars (www.astropixels.com).

Jon Philpott has been observing for just three years. When he started, his goal was to observe galaxies, and his short journey has taken him to a place where he has been able to do so while sticking to a budget.

Josh Smith enjoys diving deep into every aspect of the astrophotography, pushing processing techniques to the limits and 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/>



Dr. Fred Espenak

Robert Stephens is president and CFO of MoreData!, Inc., an organization created to manage research grants from NASA and the National Science Foundation for research scientists. He has been an amateur astronomer for nearly 4 decades and is active in asteroid research, having determined over 700 asteroid lightcurves and with over 200 research papers, articles and announcements. He enjoys traveling around the world to experience solar eclipses. The tally is: 15 total solar eclipses, 3 annular solar eclipses, 6 partial solar eclipses, and 15 total lunar eclipses. He is and has been actively involved in numerous astronomical organization including the American Astronomical Society and is the recipient of several astronomical awards.

Jim & Ginny Strogon. Jim got introduced to astronomy in the mid 1980’s and joined the Los Angeles Astronomical Society in 1992. In 1996, he began teaching astronomy for Griffith Observatory as the “traveling telescope demonstrator.” He then moved to Mt. Wilson in 1999 to operate the 60- and 100-inch telescopes. In 2007, he left Mt. Wilson and moved to Missouri with his wife Ginny, where they started the Camden County Astronomy Club.

Tim Thompson received his degrees in physics from California State University at Los Angeles; B.S. in 1978 and M.S. in 1987. He joined the Jet Propulsion Laboratory technical staff in January 1981, and retired from JPL in November 2008. He earned two NASA Group Achievement Awards for his participation in the NASA Search for Extraterrestrial Intelligence (SETI) project, and his work as a science team member for the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) project, and a NASA Center Award for his role in supporting the Center for Long Wavelength Astrophysics at JPL. He has broad research experience in radio and infrared astronomy and infrared geological remote sensing. Tim Thompson is also a long time member and former President of the Los Angeles Astronomical Society, has been a docent & tour guide at Mt. Wilson Observatory since 1982, has been a regular tournament chess player since 1968, and collects way too many books.

Gabriele Vajente has been an amateur astronomer since his childhood, and the fascination for the universe brought him to study physics. He got his master’s degree in theoretical physics at University of Pisa and Scuola Normale Superiore in Italy. Afterwards, in 2004, he started working in the field of gravitational wave detection, earning a Ph.D. in experimental physics in 2008 from Scuola Normale Superiore (Italy). In the past 12 years he has been working on the design and installation of two of the major experiments trying to detect gravitational waves on Earth. First was the Virgo experiment, a European collaboration. And then, four years ago, he moved to Caltech to work in the LIGO laboratory. Currently, he is working on the characterization of the current detectors and on the development of new technologies to further improve their sensitivity.

By day, **Matt Wedel** is an Associate Professor of anatomy at Western University of Health Sciences in Pomona, where he teaches cadaver dissection and researches the evolution of dinosaurs and birds. Over the past few years, stargazing has grown from a hobby to an obsession and now an array of activities. Matt is the president of the Pomona Valley Amateur Astronomers and he is the club liaison for the telescope program at the Claremont Public Library, where the PVAA has placed three telescopes. As a Contributing Editor for *Sky & Telescope*, he writes the monthly “Binocular Highlights” column and contributes the occasional feature article—most recently, the binocular tour of the winter Milky Way in the March, 2017 issue. As an observer, Matt’s current obsession is low-power, wide-field scanning from the San Gabriel mountains, the Salton Sea, and the Mojave Desert.

Alson Wong is a pediatrician with the Southern California Permanente Medical Group. He has been an amateur astronomer for more than 30 years and an astroimager for more than 20 years. He has been a member of the Riverside Astronomical Society since 1997 and has seen 12 total solar eclipses. Several of his images have been published in *Sky & Telescope*, and his solar eclipse images have been published in the *Journal of the Royal Astronomical Society of Canada*, in *Images from Science: An Exhibition of Scientific Photography by the Rochester Institute of Technology*, and in *Totality: The Great American Eclipses of 2017 and 2024*, by Mark Littmann and Fred Espenak. The image of the 2016 total solar eclipse by Catalin Beldea and Alson was selected as one of the winners in the Insight Astronomy Photographer of the Year competition and is currently part of the exhibition at the Royal Observatory in Greenwich, England.

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Oct 19–Oct 22, 2017 ★ Borrego Springs, CA
THURSDAY SUNDAY

Camp Oakes Location

Latitude: 34° 13' 45" North. **Longitude:** 116° 45' 21" West
Altitude: 7250 feet (2210 meters)

Sunset: 7:51 PM • Sunrise: 5:38 AM

Moonsets • New Moon to Waxing Crescent!

Thursday Night • May 25: New Moon. Sets with the Sun.

Friday Night • May 26: In Taurus. Moon sets at 9:01 PM.

Saturday Night • May 27: In Gemini. Moon sets at 10:04 PM.

Sunday Night • May 28: In Gemini. Moon sets at 11:02 PM.

Planets. **Mercury**, near Pisces, is at magnitude +0.3, and rises early in the eastern morning sky at 4:36 AM. **Venus** is in Pisces and outshining everything at magnitude -4.4, rising in the eastern morning sky at 3:34 AM. **Mars** is in Taurus at magnitude +1.6, setting shortly after the Sun at 9:22 PM. **Jupiter** is up in the eastern sky at sunset and located in Virgo, near the star Spica. It shines brightly at magnitude -2.3 and sets at 3:39 AM. **Saturn**, at magnitude +0.1, is between Sagittarius and Scorpius. It rises at 9:36 PM. **Uranus** is in Pisces at magnitude +5.9, and rises at 4:03 AM. **Neptune** is in Aquarius at magnitude +7.9, and rises at 2:13 AM.



The path of the Monday, August 21st, 2017 total solar eclipse. You have to be at the center of the path to see the total solar eclipse for the longest duration. It starts on the Oregon coast at about 10:15 AM and ends on the South Carolina coast at 2:49 PM (local times). The average duration for any spot at the path's center is about 2.5 minutes.



RTMC, Inc. is a volunteer-run, non-profit organization. If you would like to volunteer, please visit the Info Booth or contact: clubs@rtmcastronomyexpo.org.

ANNOUNCEMENTS

- ◆ The **Infirmery** for first aid is located west of the Main Hall (in the small building left of the front entrance). **Health.** Beware of sunburn and dehydration! Wear a hat and sunscreen. Also, drink lots of water. You are at 7,250 feet and have little or no UV protection.
- ◆ The **Lost and Found** is at the **Information Booth**, which is located in front of the Main Hall.
- ◆ **Cell phone signals** are spotty and might be acquired at a few locations within the campgrounds. There is no pay phone.
- ◆ **Meals** will be served from a posted menu for about \$2 to \$10, CASH ONLY, from the Cantina at the back and outside of the Main Hall. See the Program Schedule for times. Snacks, including drinks, will be available at a stand near the pool for limited times.
- ◆ **Camping/RVs.** Camp electricity is *only* for telescope equipment & computers. **NO RVs** are allowed to park at/use the Indian Village area. Generators may run *only* from 11:00 AM to 8:00 PM. No "Gray Water" discharge is permitted in camp.
- ◆ By order of the Fire Marshal, **smoking IS NOT permitted** on the grounds or in vehicles—only on the concrete patio behind **Bose Lodge**. **NO SMOKING** behind the Main Hall!
- ◆ **Security.** Do not leave equipment or other valuables unattended. Unfortunately, items have "walked" in the past.
- ◆ **Lasers** may be used *only* by speakers in presentations, at Beginner's Corner events and for collimating scopes. Otherwise, **NO LASERS**.
- ◆ **Presentations.** The opinions expressed in the presentations are those of the presenters, not of RTMC, Inc. Please do not use flash photography during presentations when the lights are turned off. The curtains, light traps, and fans in the Main Hall are courtesy of Ace Domes.
- ◆ The **Merit Awards** for telescope making are considered to be of equal value. No contest is implied.
- ◆ **Please, do not use white lights at night.** Free red cellophane is available at the Info tent in front of the Main Hall for white-light flashlights.
- ◆ **Bose Lodge** will have white lights inside at night for the non-astro minded.
- ◆ **Wi-Fi is not available** at the campground.
- ◆ **Campground Etiquette.** Please do not feed the animals—not even squirrels. Do not leave food exposed—be "Bear Aware." Please do not throw anything, including skipping stones, into the lake. Respect National Forest boundaries—do not cross the boundary to set up camp.