Enchanted Skies Star Party 2026
Lecture Program Schedule

Magdalena Astronomical Society, Inc.
Cosponsored by the Southwest Region of the Astronomical League, Inc. and
The Western Amateur Astronomers

Montosa Ranch Campground Chapel, Highway 60
October 6-11, 2026

ESSP has run annually and continuously since 1994.

FOAH Observatory several miles north of Magdalena as recorded by Robert Q. Fugate in an image recently suggested as a logo for Magdalena Astronomical Society by member Michael Mattei.

Daily Schedule 2026

Tuesday, October 6

Participants arrive and set up throughout the day.

Wednesday, October 7

12:45 – 1:00	**Welcome and Introductory Remarks** Antoine Ribaut, President, Magdalena Astronomical Society, Inc.
1:00 – 2:00	**The Long-Wavelength Array Swarm** Dr. Timothy Dolch, Associate Professor, Department of Physics and Astronomy, University of New Mexico
2:00 – 3:00	**Beyond the Lone Imager: Astrophotography Through Collaboration** Antoine Ribaut, President, Magdalena Astronomical Society. Inc., and founder, Gateway South
3:00 – 3:30	**Coffee Break**
3:30 – 4:30	**Saving Sunspot Solar Observatory** Dave Dooling, President, Sunspot Community Center and former Education Officer at National Solar Observatory
4:30 – 5:30	**Ptolemaic Astronomy and the St. John's College Armillary Sphere** Dr. William H. Donahue, Tutor Emeritus, and Benjamin Scott, Director of Laboratories, St. John's College, Santa Fe

Thursday, October 8

1:00 – 2:00	**Quasi-Periodic Oscillations: Harmonics, Coupling Efficiencies, and Forbidden State Transitions in Magnetospheric Dynamics of Cataclysmic Variable Star V0808 Aurigae** Dave Young, founder of CASCAIDIENT and life-long amateur astronomer
2:00 – 3:00	**Roundtable Discussion of the Future of ESSP and New Mexico Amateur Astronomy** To be led by Magdalena Astronomical Society's ESSP Organizing Team but encouraging *everyone's* participation!
3:00 – 3:30	**Coffee Break**

3:30 – 4:30 **Spreading Science with Occultation Astronomy**
Dr. Marc W. Buie, Planetary Astronomer, Planetary Science Institute

4:30 – 5:30 **Recent Progress in Laser Beacon Adaptive Optics**
Dr. Robert Johnson, Research Physicist, Starfire Optical Range, Kirtland Air Force Base, New Mexico

Friday, October 9

9:00 –12:00 **Swap Meet! This will be conducted near the camp kitchen where outdoor tables exist under cover.**

1:00 – 4:30 **Informal Contributed Afternoon Presentations**
Each with 15-minute Limit
With coffee break circa 2:30 PM

4:15 – 4:30 **Coffee Break**

4:30 – 5:30 **The Promise and Progress of the Magdalena Ridge Observatory Interferometer**
Dr. Michelle Creech-Eakman, Professor and Project Scientist, MROI

Saturday, October 10

9:00 –12:00 **Swap Meet! This will be conducted near the camp kitchen where outdoor tables exist under cover.**

1:00 – 2:00 **The Chiricahua Astronomy Complex of the Tucson Amateur Astronomy Association**
Jim Knoll, Director, Chiricahua Astronomy Complex

2:00 – 3:00 **The Sun-Earth Connection: Living With a Star**
Dr. Rick Fienberg, Press Officer, American Astronomical Society (retired)

3:00 – 3:30 **Coffee Break**

3:30 – 4:30 **Informal Contributed Afternoon Presentations**
Each with 15-minute Limit

4:30 – 5:30 **Conveying a "Sense of Space-Time" During Residential Experiences at Mountaintop Research Observatories**
Dr. Don McCarthy, Professor Emeritus, Steward Observatory, University of Arizona

6:30 **Distribution of Door Prizes**
This will be conducted near the camp kitchen. Prizes were very generously contributed by Celestron, TeleVue, S&S Optica, and other supporters.

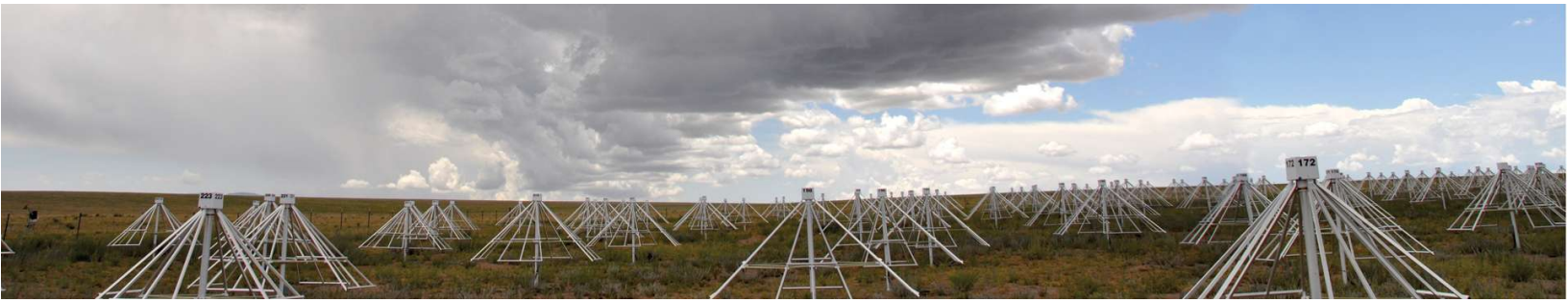
Sunday, October 11

Participants break camp throughout the morning. Please carry-out trash whenever possible to save labor for the very small host team from Magdalena Astronomical Society. **Thank you for your interest and participation, and we'll hope to see you next year!**

The **Astronomical Lyceum** is an informal collection of historical telescopes, optics, related instruments and artifacts, together a surprisingly large astronomical library. **It will be open for visitors starting at 10:00 AM at 402 South Main Street in Magdalena.** The Lyceum serves as a workshop, lab, and library for the nascent Mountain View Observatory Association, Inc., and as an informal headquarters for the Magdalena Astronomical Society, Inc. (the MAS being steward of the Enchanted Skies Star Party).

Abstracts and Biographies follow below.

The Long-Wavelength Array Swarm



Abstract: The University of New Mexico's Long-Wavelength Array (LWA) radio telescope consists of nearly 600 dipole antennas sensitive to the 10-88 MHz bandwidth, distributed in three geographically distinct sites in New Mexico. The LWA1 site with 256 antennas is located next to the NRAO Very Large Array (VLA) radio telescope. Its science has included pulsars, the diffuse radio background, radio bursts from Jupiter and the Sun, and radio transients. It was also the first instrument in the world to detect meteor radio afterglows (MRAs) in radio imaging data. In the Sevilleta National Wildlife Preserve, 90 km to the northeast of LWA1, is the LWA-SV site, also with 256 antennas. Its science has included pulsar wind nebulae, terrestrial lightning, and sporadic E science (dynamic structures in the E-layer of the ionosphere). A new 64-antenna mini-station of the LWA 19 km north of the VLA, LWA-North Arm, has added another baseline to this distributed telescope with a design replicable by smaller institutions. Additionally, Caltech's Owen's Valley LWA (LWA-OVRO) has expanded LWA science with an emphasis on cosmic ray detection and SETI. These telescopes, along with additional mini-stations under construction at Comanche Springs, Texas (Texas Tech), Meteor Crater, Arizona (ASU), and Big Bend, Texas (Sam Houston State), will comprise the future, more widely distributed LWA-Swarm. Semi-regular calls for proposals are released and are open to professional and amateur radio astronomers alike.

Dr. Timothy Dolch is an Associate Professor of Physics and Astronomy at The University of New Mexico. He received his BS from the California Institute of Technology in 2003 and his PhD in Physics & Astronomy from the Johns Hopkins University in 2012. He was previously a professor of physics at Hillsdale College, after having held postdoctoral positions at Oberlin College and Cornell University, both with the North American Nanohertz Observatory for Gravitational Waves (NANOGrav) collaboration. In NANOGrav he has chaired the Education and Public Outreach Working Group. He also edited and co-authored the book *Radio Telescope Instrumentation for Teaching* from IOP Publishing (2025).

Beyond the Lone Imager: Astrophotography Through Collaboration

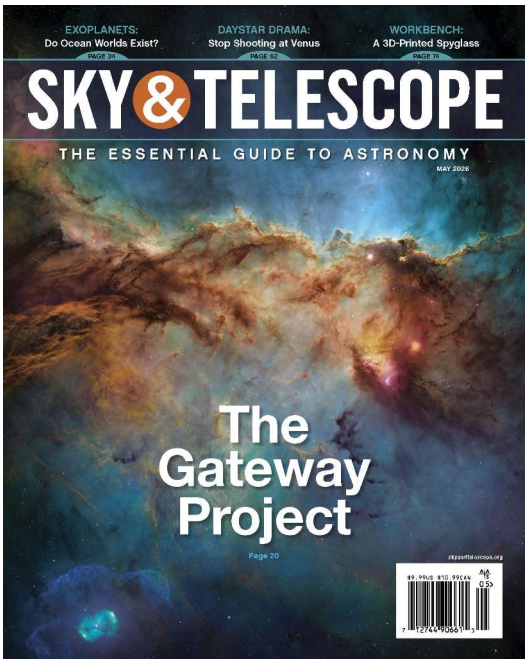
Abstract: Astronomy has always advanced through collaboration, yet amateur astrophotography remains surprisingly solitary. We often build similar systems, solve the same technical problems independently, collect our own data, and process it alone. This presentation looks at a different model.

The Gateway Project of AAA (New York City's Amateur Astronomers Association) brings together imagers who share telescopes, observing time, technical knowledge, data, and artistic interpretation. Its expansion to Gateway South – a remotely operated observatory under the pristine skies of central Chile – extended that collaboration across continents and opened the southern sky to observers thousands of miles away.

Using Gateway as a working example, I shall discuss what becomes possible when astrophotographers stop thinking only in terms of individual equipment and individual images, and instead begin pooling resources and expertise. Long integrations, shared datasets, complementary technical skills, different artistic interpretations, education, and even scientifically useful observing programs all become more accessible. The larger idea is simple: **We can accomplish far more together than we can from our individual corners of the sky.**

Antoine Ribaut is an astronomer, astrophotographer, filmmaker, and international artist splitting his time between New Mexico and France. He is President of the Magdalena

Astronomical Society and founder of Gateway South, the Southern Hemisphere component of the Amateur Astronomers Association of New York's Gateway remote-telescope project. Operating from northern Chile, Gateway South gives an international community of astrophotographers collaborative access to some of the world's darkest southern skies. The Gateway Project and its collaborative approach to astrophotography were featured as the **cover story of the May 2026 issue of *Sky & Telescope***. Antoine's interests increasingly center on bringing together technology, science, education, and artistic practice through astronomical collaboration.



Gateway South's Southern Hemisphere telescope in Chile in the Observatory enclosure.

Saving Sunspot Solar Observatory

Abstract: Dave Dooling will review efforts to rescue Sunspot Solar Observatory – with options that include a Dark Skies RV Park – from planned demolition by the National Science Foundation. Sunspot originated in 1947 as one of the first space weather forecasting stations and grew into a world-class solar physics research site. Sitting on land owned by the U.S. Forest Service, it was developed and operated by the U.S. Air Force until 1972 when the NSF took over. New Mexico State University assumed most operations in 2012. However, a mercury leak in a bearing of the Dunn Solar Telescope led the NSF to decide to demolish the Dunn and other facilities, remediate it to virgin forest, and hand it back to the Forest Service, and to ignore pleas for to repurpose it as a multi-use science park.

Dave Dooling is an award-winning science writer and educator who has been involved in the space program since he worked as a security guard for Apollo 11 in 1969. As science editor of *The Huntsville Times* (1977–85) he covered Space Shuttle development and early missions, as well as Hubble Space Telescope development. After working at U.S. Space Camp and various NASA contractors (1985–2002) he moved west to work as education officer at the National Solar Observatory at Sunspot (2002–12) where he developed outreach materials for what is now the 4-meter Daniel K. Inouye Solar Telescope on Maui. He then worked as education director at the New Mexico Museum of Space History (2012–23). Since "retiring," he has worked as a freelance science educator and helped develop outreach materials for NASA's PUNCH mission ("Looking at next to nothing with sunglasses"). Since March this year, he has been working to stop the National Science Foundation from demolishing Sunspot Solar Observatory.

Ptolemaic Astronomy and the St. John's College Armillary Sphere

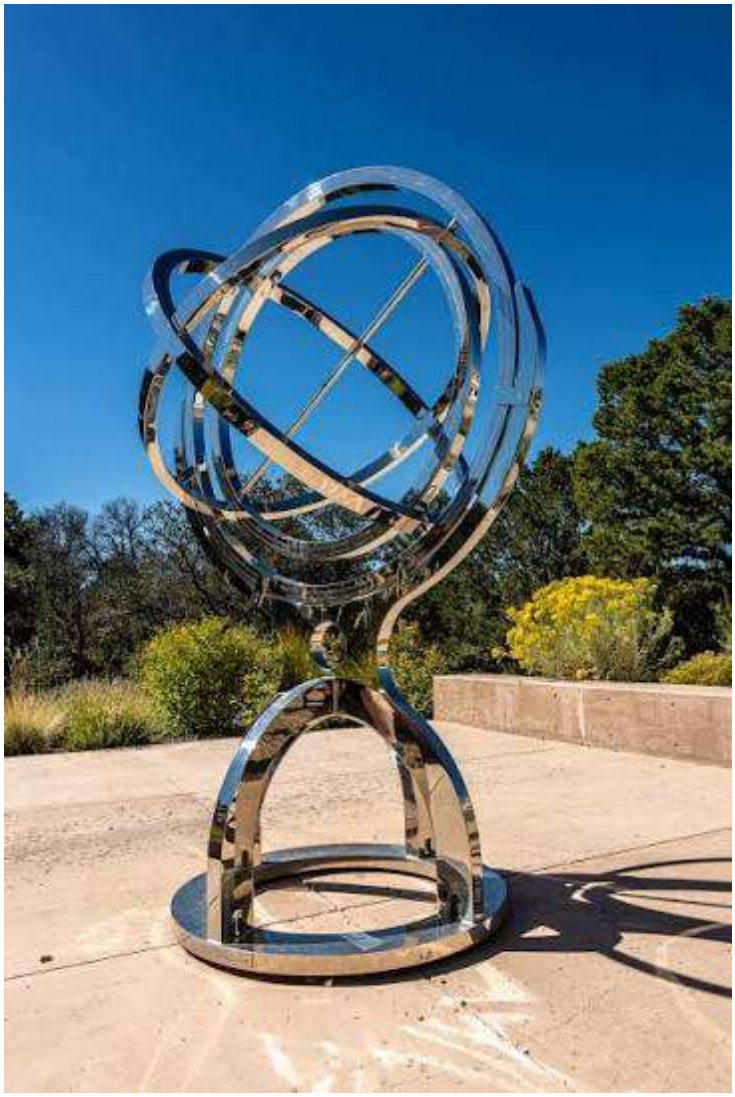
Abstract: Students at St. John's College in Santa Fe, New Mexico, study the history of astronomy, not just by reading historical geometric and astronomical texts, but also by practicing historical mathematics and measurement. Using what is believed to be the only actively functioning armillary sphere of its kind in the world (built by David Harber and following the design of Tycho Brahe), we are able to take measurements with the naked eye and work with a geocentric model of the cosmos as embodied by the instrument itself.

Dr. William H. Donahue received his BA from St. John's College, Annapolis, in 1967, and his Ph.D. from the University of Cambridge, England, in 1973. His dissertation, *The Dissolution of the Celestial Spheres, 1595-1650*, was published by Arno Press in 1981. From 1973-1976, he taught in the Great Books curriculum at St. John's College in Santa Fe, leading seminars and tutorials in ancient, medieval and modern literature and philosophy; ancient Greek; music; classical physics; and Kepler's astronomy. For this last, he translated substantial selections from Kepler's *Astronomia nova*.

In 1976, he left St. John's to organize and teach mathematics and the sciences at the New School of Santa Fe, a completely individualized primary and secondary school. In 1981, he left the New School and obtained an individual grant award from the National Science Foundation to complete the translation of Kepler's *Astronomia nova* which he had begun while at St. John's. Subsequently, he received grants from the National Endowment for the Humanities for a guided study of Kepler's *Astronomia nova* and for the first English translation of Kepler's *Optics*, and from the American Philosophical Society for study of the Kepler manuscripts in St. Petersburg, Russia.

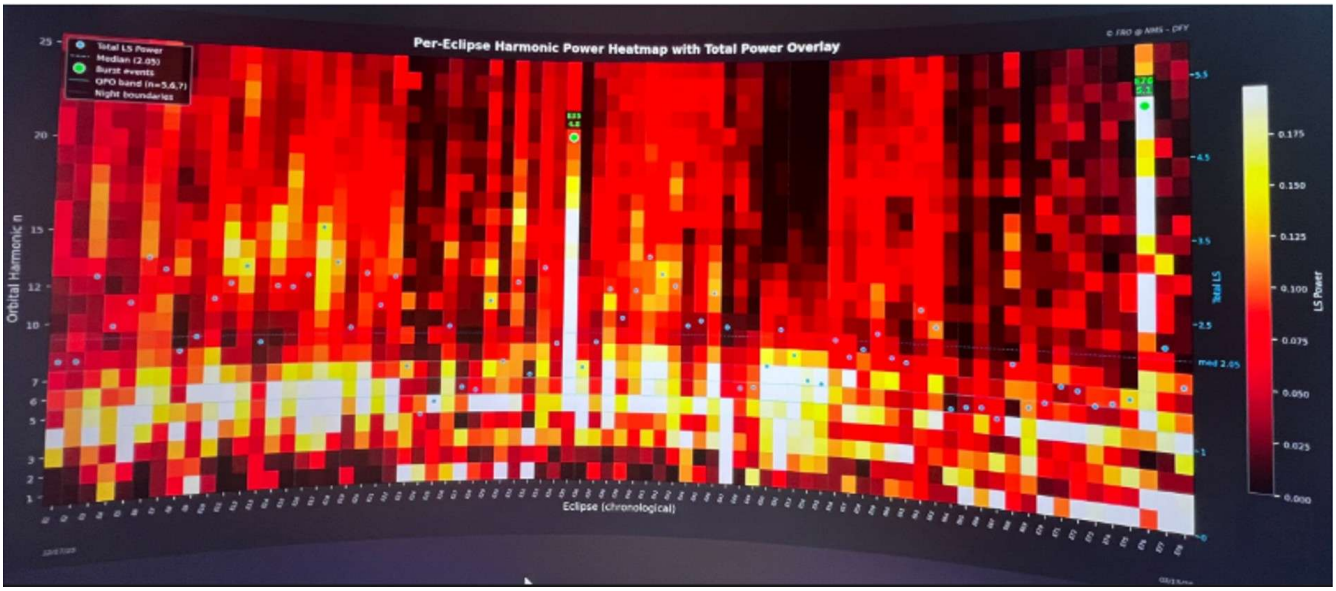
He has published numerous articles on Kepler in the *Journal for the History of Astronomy* and the *British Journal for the History of Science*. His 1988 *JHA* article, "Kepler's fabricated figures: covering up the mess in the New Astronomy," was featured in the *New York Times* Science Section, and was reported in media worldwide. In 2005, Bill was appointed Director of Laboratories at St. John's College, Santa Fe. In this capacity, he administered the college's unique historically-based science program, required of all undergraduates. Topics covered include origins and development of life sciences; physical sciences from ancient and medieval statics and mechanics through the seventeenth-century scientific revolution and Faraday and Maxwell's electrodynamics to relativity theory and quantum mechanics; elements of chemistry (including development of atomic theory); and a developmental approach to evolution and modern genetics. He retired from the College in 2016, and is now Tutor Emeritus.

Benjamin Scott is a recent alumnus of St. John's and is the current Director of Laboratories at the College and is just now getting into amateur astronomy and the history of science.



Quasi-Periodic Oscillations: Harmonics, Coupling Efficiencies, and Forbidden State Transitions in Magnetospheric Dynamics of Cataclysmic Variable Star V808 Aurigae

Abstract: V808 Aurigae is an AM Her-class polar in a sub-two-hour orbit. It has an intense magnetic field (40–70 megagauss) that channels plasma from the donor red dwarf (which is filling its Roche lobe) onto the white dwarf's poles along its magnetic field lines. We present observational results from a Q1 2026 observing campaign that covered 101 orbits and over 100,000 observations. We employed high-cadence edge-scanning photometry (3-5 second integrations) with the 1-meter PW CDK 1000 at New Mexico Skies to characterize the light curve morphology in detail, yielding a high-resolution time-slicing of the accretion column on which we could derive a transition state space, prove forbidden transitions, observe quasi-periodic oscillations, analyze the full comb of harmonics, and show the reconfiguration of the plasma along the magnetic field lines. We applied a range of advanced analytical techniques—including unsupervised machine learning, DTW, MCMC-HMM, and VAE/neural-ODE—which allowed us to create deep visualizations and sonifications of the underlying physics, resulting in a movie of the field evolution. Moreover, we compared these observational results with the system's MHD modeling to both confirm and expand upon the insights from those methods.



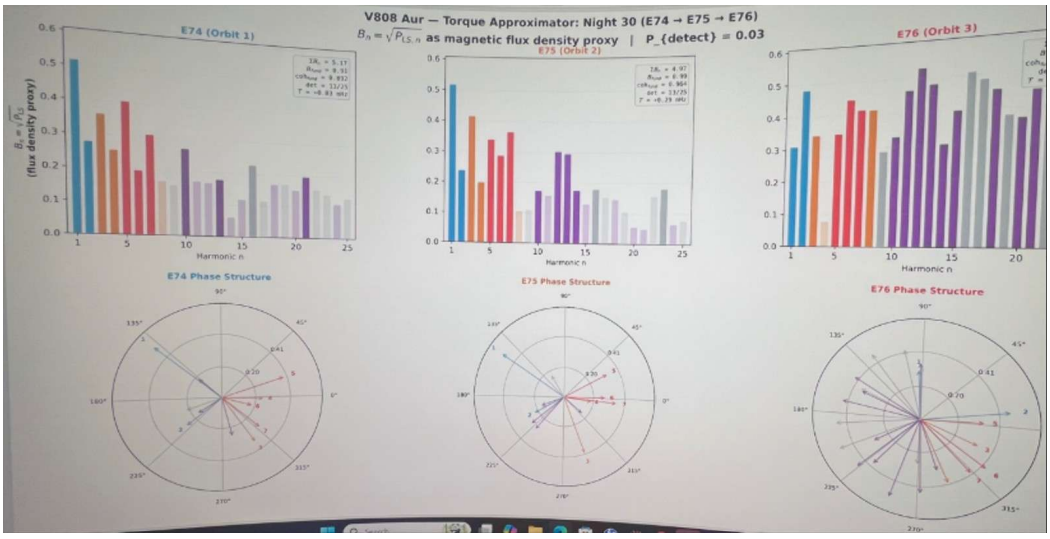
Dave Young has been an avid amateur astronomer for 45 years, conducting studies in photometry, astrometry, and spectroscopy, particularly focusing on cataclysmic events. He grew up in Canton, Ohio, and at 15, he ground his first 8-inch Newtonian mirror. He attended Mount Union University, attaining both B.S. and B.A. degrees with majors in physics, mathematics, and religion, and minors in astronomy and philosophy. Fortunately, Mount Union had two Yale astrophysicists and several great scopes at Clarke Observatory, including a 24-inch coude, a 9-inch refractor, and a Fabry-Perot interferometer. They imparted rigorous tutoring and fostered a love of physics, astronomy, and equipment building. As a special study, Dave traveled to Tanzania, East Africa, for the historic 1976 solar eclipse, which offered 7 minutes and 23 seconds of totality. Dave started his career as a research physicist at Timken Research and later pursued an M.S. in systems engineering and artificial intelligence at VPI, doing two master's

theses in robotic manufacturing and AI knowledge systems. After 7 years in industry, Dave joined the Boston Consulting Group (BCG). There, as a Senior Partner and Managing Director, he developed global corporate strategy for companies around the world, led the industrial goods practices, helped launch and grow the social impact and climate and sustainability practices, and served as a Fellow at BCG's think tank, the BCG Henderson Institute, where he specialized in sustainable business model innovation and applied complexity science approaches to the new industrial economy. Dave also served as Global Chief Operating Officer of World Vision International, a global development and humanitarian response NGO with 47K staff in 88 nations reaching 150 million children a year. In mid-2025, Dave founded CASCAIDIENT, a decision intelligence, innovation ventures, and analytics platform company which uses AI and complexity science for insights on the rapidly emerging new industrial economy.

Dave always maintained active engagement with astronomy throughout his professional career, doing photometry and astrometry with his robotic observatory and 16" SCT in Westwood, Massachusetts. Later, he installed a 1-meter PlaneWave CDK at New Mexico Skies and added high-resolution spectroscopy with a Shelyak Whoppshel (R=32,000) to focus on cataclysmic events. He also expanded Far Reach Observatories and built a sister facility for research and public outreach near the new International Dark Sky site in the Maine Northwoods. That facility hosts 7 instruments, including a PlaneWave 600mm CDK with two spectroscopes and a Lundt Solar Telescope for daytime programming. The site is expanding this fall with the arrival of a next-generation Solar Radio Telescope built by POAM Electronics in Manchester, UK, for solar and ionospheric studies, taking advantage of the site's location in a unique sub-auroral zone due to its 55-degree geomagnetic latitude.

He remains a Senior Partner Emeritus and Senior Advisor to BCG, actively involves himself with the Santa Fe Institute, advises the Aspen Institute, invests as a venture capitalist in AI and water tech startups, and serves on the boards of MACROCOSM, Ceres, and KickStart International.

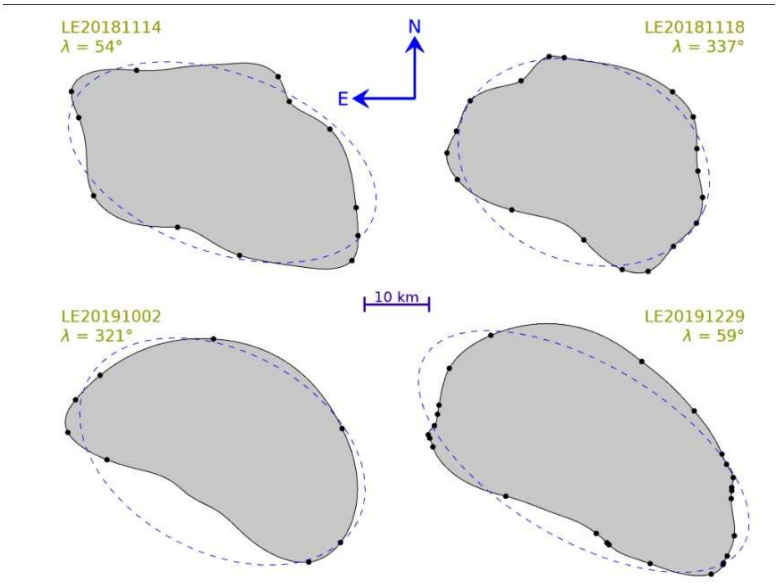
Of all his activities, astronomy remains his deepest research interest and joy.



Spreading Science with Occultation Astronomy

Abstract: Occultations have been a mainstay of the astronomical community for a long time. The game has changed thanks to the results of the Gaia Mission. Fueled by the needs of the New Horizons mission, I developed a new style of occultation deployments that I call "curated campaigns." In this concept, the equipment is what is being curated, and the campaign brings together interested but unskilled observers to chase the shadow. Since 2017, I have led more than 35 such campaigns scattered across the globe. The challenge to this method is finding ways to support the deployment costs. When critical to a mission, money ceases to be a driving issue. For more routine but no less important science, traditional federal funding sources have proven to be inadequate to the task. I am working to find alternate ways to continue and even build on past campaign successes and use these hands-on campaigns to bring science to the masses. I will provide highlights of noteworthy results and share some of my developing plans for the future. The fun part of all this is that curated campaigns can be scaled up to an almost arbitrarily large scale that does not need to be centrally organized.

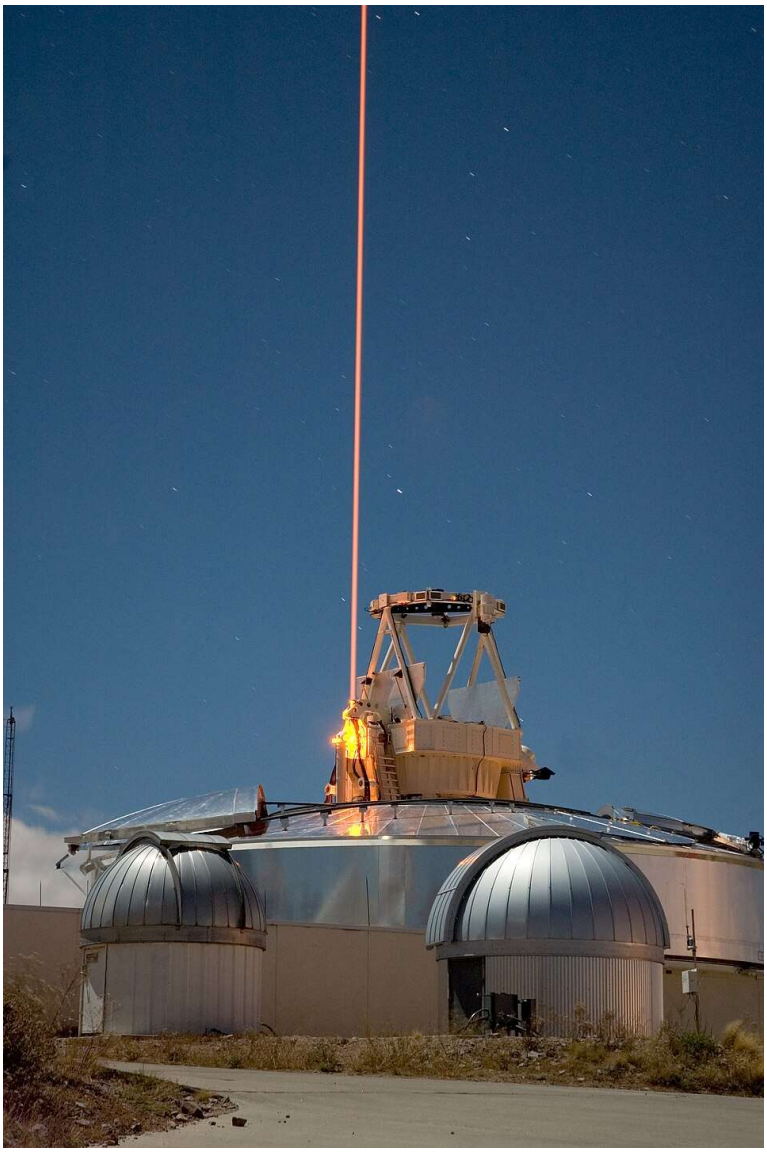
Dr. Marc Buie is a graduate of the Lunar and Planetary Laboratory at the University of Arizona. Dr. Buie has worked at the University of Hawaii, Space Telescope Science Institute, Lowell Observatory, the Southwest Research Institute in Boulder, and now in retirement is affiliated with the Planetary Science Institute. Pluto has been a central theme of Buie's research for decades and he is a member of the New Horizons science team. He also discovered the extended mission target, Arrokoth, and co-discovered moons as well as more than a thousand additional small bodies in the outer solar system. He is also a member of the Lucy mission and EMA mission science teams and is busy learning more about their targets through the use of occultations and lightcurve photometry. In retirement he is pursuing continued development of curated occultation campaigns as well as writing about these experiences. See occsci.substack.com to follow along.



Recent Progress in Laser Beacon Adaptive Optics

Abstract: Scientists at Starfire Optical Range (SOR) have been researching Rayleigh and sodium beacons for adaptive optics (AO) for over 30 years. In 2016, we combined light from two 22 W sodium lasers to form a single beacon. These commercial lasers use resonant-frequency doubling of light from a Raman fiber-amplifier. In 2019, we started to develop a 75 W sodium laser for better correction of turbulence in poor seeing. We increased the beacon return flux by chirping the laser wavelength to compensate for recoil of optically pumped sodium atoms. In addition, we have demonstrated a single-sideband D2b re-pumper. In this talk, we discuss results from on-sky tests in 2025 that demonstrate improvement in beacon brightness by using these techniques. We also discuss sodium beacon research in low-cost semiconductor lasers, novel techniques for higher laser power, and uplink compensation to reduce the size of the beacon in the mesosphere, thereby improving sensitivity of the wavefront measurement.

Dr. Robert Johnson is a research physicist and technical advisor at the Starfire Optical Range (SOR) at Kirtland Air Force Base, New Mexico, USA. Starfire Optical Range is part of the Air Force Research Laboratory and US Space Force. Robert has worked at SOR for over 25 years, both as an active-duty officer and as a government civilian. He received his Ph.D. in optical sciences in 2001 from the University of Arizona; an M.S. in applied physics in 1993 from the Air Force Institute of Technology; and a B.S. in physics in 1985 from Texas A&M University. His main research interests include developing wavefront sensors and sodium-beacon lasers for adaptive optics, which are used for ground-based space domain awareness and astronomy. In 2018, he received the Harold Brown Award, which is the highest award given to a scientist or engineer who applies scientific research to solve a problem critical to the needs of the Air Force.



The Promise and Progress of the Magdalena Ridge Observatory Interferometer

Abstract: The Magdalena Ridge Observatory Interferometer (MROI) is an ambitious optical/infrared telescope array which, when completed, will consist of 10 movable telescopes spanning distances of 8 to 347 meters. This physical scale corresponds to angular scales on the sky of 50 down to 0.5 milliarcseconds which, when combined with the sensitivity of the facility, will allow us to make very-high resolution images of a large variety of astronomical phenomena. The true promise of the MROI will be achieved with the completed facility, which will be both more sensitive and more efficient at producing high-resolution images than existing optical telescope arrays built today. I will present the key science mission, some example science cases, and current progress of the facility, as well as future plans over the next several years.

Dr. Michelle Creech-Eakman started at New Mexico Tech as a physics professor and the Project Scientist for the MROI in 2003. Prior to joining NM Tech she was a postdoctoral scholar at Caltech and the Jet Propulsion Lab working on infrared instrumentation and observations with the Palomar Testbed and Keck Interferometers. Along with teaching courses, publishing more than two hundred papers, building infrared instrumentation, and working with the MROI team, she has helped a few dozen graduate students complete MS and PhD degrees in astrophysics and instrumentation.

MROI concept design illustration for the completed facility. Credit: Tyson Eakman and Andres Olivares

Chiricahua Astronomy Complex of the Tucson Amateur Astronomy Association

Abstract: The Tucson Amateur Astronomy Association (TAAA) Chiricahua Astronomy Complex (CAC) is located about 100 miles southeast of Tucson, Arizona, near the Chiricahua Mountains and about 15 miles from the Chiricahua National Monument. CAC is a 16-Acre complex with about eight acres developed and located in Cochise County Arizona. CAC is a Bortle 2 site. The site was purchased in 2008 with construction starting shortly thereafter. Site development is currently in Phase II of the Master Site Plan. We have several telescopes available for member use to include a 40-inch f/3.7 Newtonian reflector in a Dobsonian configuration, a 32-inch f/13 DFM research-grade classic Cassegrain, 25-inch and 18-inch Obsession telescopes, a 14-inch Celestron, a 9-inch folded refractor, and several additional telescopes. The site also has 20 pads with electricity for member personal telescope use, 10 sleeping rooms and a classroom, seven RV sites with electricity, five remote member-leased observatories, and a tent camping area. TAAA was established in 1954 and has about 700 members with one quarter of them outside of Southern Arizona. We have five special interest groups for member development and conduct over 200 outreach events annually.

Jim Knoll is the Director of the Chiricahua Astronomy Complex, overseeing a team of 13 volunteers. He is also the Tucson Stargazing Adventures private star party manager. Jim has a B.A. in Business Management from Montana State University and an M.A. in Business from the University of La Verne, California. Jim is a retired U.S. Air Force officer. He got his first telescope in 1969 during the height of the Apollo lunar landings but did not get back into amateur astronomy until moving to Tucson in 1999.

The Sun-Earth Connection: Living With a Star

Abstract: The Sun, giver of light and heat and sustainer of life on Earth, is the only star in the heavens that we can examine up close and in detail. What do we know about its internal structure, what makes it shine, its dynamic atmosphere, and how it affects our planet and everything else in the solar system? We know a lot, but mysteries remain. Hear how astronomers are working to solve them with new telescopes and instruments on the ground and in space.

Dr. Richard "Rick" Tresch Fienberg is a highly prominent astronomer and science communicator who grew up in California, lived in Massachusetts and New Hampshire for 45 years, and now resides in New Mexico. He studied physics at Rice University and earned his doctorate in astronomy at Harvard University with a thesis on celestial imaging with an infrared array camera. He then spent 22 years at *Sky & Telescope* magazine, including eight as Editor in Chief, followed by 12 years as Press Officer of the American Astronomical Society. The International Astronomical Union has bestowed the name Rickfienberg on asteroid (9983). NASA awarded its Exceptional Public Achievement Medal for his work promoting eye safety for the August 2017 U.S. solar eclipse, and the Astronomical Society of the Pacific honored him with the 2024 Klumpke-Roberts Award for outstanding contributions to the public understanding and appreciation of astronomy. Rick is co-author with Stephen P. Maran of *Astronomy For Dummies,* 5th edition (John Wiley & Sons, 2023).

Dr. Rick Fienberg's new backyard observatory recently completed in New Mexico.

Conveying a "Sense of Space-Time" During Residential Experiences at Mountaintop Research Observatories

Abstract: The public, young and old, are anxious to explore the Universe, especially behind the scenes. As modern telescopes probe fainter and in higher detail, we explore farther in space and earlier in time, enabling us to understand our place in the Universe, indeed our very origins. Appreciating the full meaning of these discoveries benefits from conceptual grasp of topics in astronomy & physics, cosmology, and a "sense of scale." For 40 years, the University of Arizona's **Astronomy Camp** has opened Arizona's Sky Island research observatories and engaged the public in authentic, hands-on exploration. The impacts are widespread, propagating through new generations of scientists and educators, Boy/Girl Scouts, K-12 classrooms, and even hardware on the James Webb Space Telescope. Using personal examples, together with philosophy and techniques, this talk describes Camp's multi-faceted educational program.

Dr. Don McCarthy has been a research Astronomer and Distinguished Professor with Steward Observatory at the University of Arizona. He specializes in infrared astronomy and has also been passionately doing inquiry-based STEM education for all age levels throughout his life. With his own instruments, he directly detected low mass companions to nearby stars, imaged emission from the Galactic Center source Sgr A*, characterized circumstellar dust disks, discovered waves in Pluto's atmosphere, and examined the surface characteristics of moons, asteroids, and Kuiper Belt Objects. He has directed the Astronomy Camp education programs for ~40 years. He received an undergraduate degree in physics at Princeton (1970) and a Ph.D. in astronomy from the University of Arizona (1976). He was a Finalist in NASA's initial Space Shuttle astronaut selection (1978) and served in the U.S. Army after college R.O.T.C.

The historic 61-inch Kuiper telescope at 8,230 feet on Mount Bigelow is among the instruments regularly used during the University of Arizona's long-running **Astronomy Camp** program.

Special Acknowledgment

ESSP organizers and program contributors, involving members of the Magdalena Astronomical Society, Inc., and local astronomers all along what we call New Mexico's "Highway 60 Dark Sky Corridor," are grateful to Dale and Gale Armstrong, owners of the Montosa Ranch Campground, in the liberal arrangements for our use of the Camp for the first time in 2024 and continuing through 2026. We believe it has great potential for ongoing ESSP educational activities that began in 1994 and have run annually on or near Highway 60 ever since. Gale Armstrong serves as our current local State Representative at the New Mexico Roundhouse.