



**AMERICAN ASTRONOMICAL SOCIETY**

Enhancing and sharing humanity's scientific understanding of the universe since 1899.

**AAS Eclipse 2017 Workshop**

**Public Program**

**June 10 - 11, 2016**

**Southern Illinois University Carbondale**



**Friday, June 10, 2016**

**SIU Student Center**

8:30 am: Doors open to public.

9:00 am - 12:00 pm: Public Session talks and workshops.

Main area Presentations (Ballroom B)

9:00 am: Welcome - Brad Colwell, SIU Carbondale Chancellor

9:15 am: Shadia Habbal – The Magic of Total Solar Eclipses

Main Area Presentations (Ballroom B)	River Room Workshop (Registration Required)
9:35 am: Charles Fulco – Eclipses 101	<b>Workshop 1: Eclipse Tourism</b> –Cinnamon Smith, Carbondale Convention and Tourism Bureau
9:55 am: David Baron – Using the Eclipse to Illuminate History	
10:15 am: Jay Ryan – Illustrating the Eclipse	

10:35 – 11:00 am: Exhibitor and Poster viewing (Corker Lounge)

Main area Presentations (Ballroom D)

11:00 am: Fred Espenak - Glorious Totality!

11:30 am: Michael Zeiler - Tour of the Path of Totality

12 :00 – 1:00 pm: Lunch Break

1:00 – 1:30 pm: Exhibitor and Poster viewing (Corker Lounge)

Main area Presentations (Ballroom D)

1:30 pm: Matt Penn - The Citizen CATE Experiment

Main Area Presentations	River Room Workshop
1:50 pm: Bob Baer – Southern Illinois Eclipse 2017 planning 2:10 pm: Taryn Mason – Adler’s Year of the Eclipse 2:30 pm: Jim Todd - OMSI Preparations in Oregon 2:50 pm: Don Ficken - Eclipse Preparations in St. Louis 3:10 pm: Michael Bakich – Eclipse Preparations in St. Joseph	<b>Workshop 2: Eclipse cinematography</b> – Mike Kentrianakis, Imaging the partial and total phases of the eclipse. Luca Quaglia, Flash Spectrum Cinematography

3:30 – 3:50 pm: Break

Main area Presentations (Ballroom D)

3:50 pm: NASA Eclipse 2017

Main Area Presentations	River Room Workshop
4:10 pm: Mike Kentrianakis – How to Work with the Media 4:30 pm: Michael Zeiler – Capitalizing on Social Media 5:00 pm: Dan McGlaun - Alaska Airlines Flight 870 - Flying Through the Shadow	<b>Workshop 3: Economical Eclipse Activities.</b> Michelle Nichols, Master Educator at Chicago's Adler Planetarium, will highlight fun, quick, and easy Sun and Moon activities for general public and family audiences using materials you probably already have around the office or your house.

Main area Presentations (Ballroom D)

5:30 pm: Shadia Habbal - Closing remarks

**End Day 1**

**Saturday, June 11, 2016**

**SIU Student Center**

8:20 am: Doors open to public

8:30 – 10:00 am: Main area Presentations (Ballroom D)

8:30 am: Ernie Wright - NASA Visualizations

8:50 am: Luca Quaglia - Precision Timing Through Flash Spectra

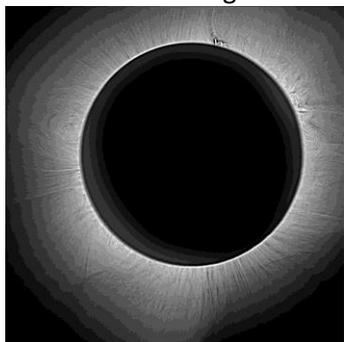
9:10 am: Xavier Jubier - Google Interactive Eclipse Maps

10:00 am: End of open public session talks.

10:20 am - 3:00 pm: Citizen CATE Experiment Workshop (\$20 Registration Required)

Training workshop for the Citizen CATE (Continental American Telescopic Eclipse) Experiment

hosted by the SIU Carbondale Citizen CATE Team. The workshop is intended for new / potential volunteer observers who are interested in being part of observational teams along the path of the 2017 eclipse.



*- The Citizen CATE Experiment will use a fleet of telescopes to observe the total solar eclipse of 21 Aug 2017. As the shadow of the moon travels across the continental USA, citizen astronomers from more than 60 sites will take images of the brightness of the inner solar corona. While the totality phase of the eclipse will last only 2 minutes at each site, the combined Citizen CATE Experiment data set will reveal for the first time how this part of the solar atmosphere changes during 90 minutes. CATE16 data from Bob Baer and Sarah Kovac, Tanjung Pandan, Indonesia. Additional information on the Citizen CATE Experiment: <https://sites.google.com/site/citizencateexperiment/>*

10:20am: Welcome

10:30am - 11:50: CATE Training seminars

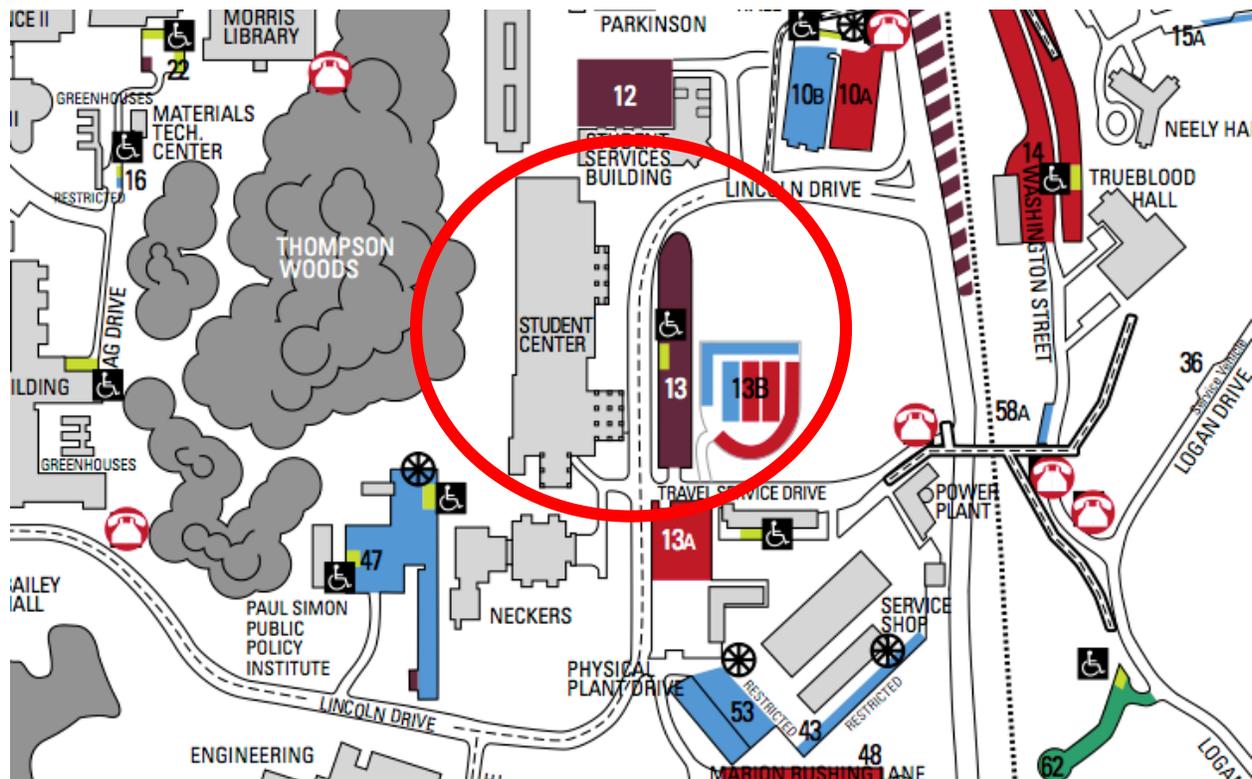
12:00 - 1pm: Lunch

1:10pm - 3pm: Training Activity - Solar imaging using the CATE prototype instrument

## End Day 2

*Shuttles back to hotel*

## Parking and Location of Conference



The AAS 2017 Eclipse Workshop will be held in the **Student Center (1255 Lincoln Drive, Carbondale, IL 62901)** on the **Southern Illinois University Carbondale campus**. Parking will be made available in the metered lot 13 and Lot 13B, directly east of the Student Center. These areas are circled in **red** on the map.

## Event Webcasting

Webcasting of Day 1 is to be done by WSIU (campus PBS station).

## About the speakers:



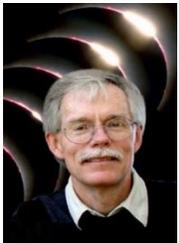
**Michael E. Bakich** is senior and photo editor of Astronomy magazine. He has authored five books on Astronomy and has traveled to 13 total solar eclipses as a guide and eclipse expert. Michael serves on a national task force under the American Astronomical Society to help prepare the public for the 2017 Total Solar Eclipse. In Missouri, he has arranged a huge public eclipse-watching event in St. Joseph at Rosecrans Memorial Airport. He currently hosts the only 2017 eclipse-related podcast on iTunes. In 2017, he will conduct the largest public eclipse watching event ever. His latest book is "Your Guide to the 2017 Total Solar Eclipse." Asteroid 131245 (Bakich) is named for him.



**David Baron** is a Colorado-based author, eclipse chaser, and former NPR science correspondent. His forthcoming book, to be published next June, tells the story of a total solar eclipse that crossed America in 1878 and inspired the country to scientific greatness.



**Bob Baer** is a staff member in the SIU Physics department where he directs the public astronomy observations and general physics outreach events. He is a member of the Astronomical Association of Southern Illinois and is the Illinois State Coordinator for the Citizen CATE (Continental America Telescopic Eclipse Experiment). He is the co-chair of the Southern Illinois Eclipse 2017 – 2024 steering committee and is coordinating citizen science and eclipse outreach partnerships for the SIU Carbondale eclipse events.



**Fred Espenak's** aka "Mr. Eclipse" is a retired NASA astrophysicist and world authority on the prediction of eclipses. He has written over a dozen books on eclipses including his recent "Eclipse Bulletin: Total Solar Eclipse of 2017 August 21." Espenak runs 3 web sites on eclipse prediction ([www.EclipseWise.com](http://www.EclipseWise.com)), eclipse photography ([www.MrEclipse.com](http://www.MrEclipse.com)) and astrophotography ([www.AstroPixels.com](http://www.AstroPixels.com)). He has witnessed 27 total eclipses of the Sun and will speak about some of them in his presentation "Glorious Totality."



**Don Ficken** is a member of the St. Louis Astronomical Society and Astronomical Society of Eastern Missouri. Don founded the St. Louis Eclipse Task Force in 2014 and has grown the task force into an active community collaboration whose focus is to raise awareness, safety and planning in the St. Louis area related to the 2017 eclipse.



**Chris Giersch** is employed with Genex Systems and is the Education and Public Outreach Manager for the Space Technology and Exploration Directorate at NASA Langley Research Center in Hampton, VA.

After working as a high school math and science teacher for a number of years, Chris accepted the position at NASA Langley as Program Manager for NASA CONNECT™, the show that connects you to math, science, technology, and NASA. He worked on 20 episodes over a five-year span winning three regional Emmy Awards. Chris transferred to the Exploration Office in 2004. Chris is the co-creator, project manager, and host of NASA EDGE, the vodcast that takes an inside and outside look at all things NASA. The award-winning vodcast has been downloaded over 55 million times since 2007 with over 135 titles.



**Shadia Rifai Habbal** is a professor at the Institute for Astronomy, the University of Hawaii. She specializes in the Sun and the solar wind, leading scientific expeditions to explore the physics of the corona during total solar eclipses. She will give an overview of the importance of total solar eclipses for research in astrophysics and for public education.

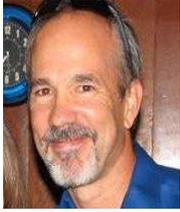


**Lou Mayo** is a planetary scientist and program manager working for ADNET Systems at NASA's Goddard Space Flight Center, and a professor of astronomy at Marymount University. He has over 25 years experience supporting NASA space and Earth science missions and data systems, including 11 years managing the Voyager IRIS and Cassini CIRS instrument teams for private industry. He has published a number of papers on the atmosphere of Titan focusing on modeling atmospheric aerosols and condensates.

Lou is the Program Manager for the NASA Heliophysics Education Consortium (HEC) that is overseeing NASA's Eclipse 2017 Science Education program. He is a member of the DC Space Grant Consortium and the American Astronomical Society/Division for Planetary Sciences education committee. He is a frequent author and speaker on topics in astronomy and space physics and was a columnist for Mercury Magazine for three years. Lou runs an international network of after school astronomy clubs and is active in developing nationwide space science education programs for NASA.



**Michelle Nichols** is Master Educator at the Adler Planetarium in Chicago, IL. She earned a Bachelor of Science degree in physics and astronomy from the University of Illinois at Urbana-Champaign and a Master of Education degree in Curriculum and Instruction from National-Louis University. Ms. Nichols has been employed at Adler for over 20 years; she is the educator on Adler's Far Horizons high-altitude balloon and CubeSat programs and she coordinates Adler's *'Scopes in the City* telescope outreach program.



**Matt Penn** is an Associate Astronomer with the National Solar Observatory, Tucson, Arizona. He is the PI of the Citizen CATE (Continental America Telescopic Eclipse) Experiment, a Citizen Science project that will use a fleet of telescopes to observe the 2017 total solar eclipse.



**Jay Ryan** has been using visual media for visual explanations of the visual subject of astronomy, for over 20 years. As the host of [AmericanEclipseUSA.com](http://AmericanEclipseUSA.com), he hopes to help a new generation of American eclipse chasers understand and appreciate this amazing phenomenon.



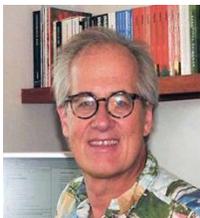
**Jim Todd** is the Director of Space Science Education at the Oregon Museum of Science & Industry (OMSI). He manages OMSI's Kendall Planetarium, which includes many hats: programming in astronomy and space exploration; teacher training in astronomy and space education; coordinating OMSI hosting of star parties in conjunction with local amateur astronomy groups; and Co-Director of the Oregon Star Party. Jim will also coordinate the 2017 solar eclipse viewing from Salem Fairgrounds on August 21, 2017.



**Mark Steven Williams**, amateur radio callsign K9GX, is a broadcaster and radio amateur who has operated ham radio from North America, the Caribbean and Scandinavia, presented dozens of astronomy and ham radio outreach events including school contacts with astronauts aboard a Space Shuttle mission and the International Space Station. Williams is former Observatory Director at the Louisville Astronomical Society's James Baker Observatory, former President of Louisville's Amateur Radio Transmitting Society radio club and author of "Out of this World Outreach", Sky and Telescope magazine, May, 2014. Known regionally as the "StarGeezer" his astronomy outreach website is [www.StarGeezerAstronomy.com](http://www.StarGeezerAstronomy.com)



**Ernie Wright** has been a visualizer in the Scientific Visualization Studio at NASA Goddard Space Flight Center since 2008. He works primarily with data from Lunar Reconnaissance Orbiter."



**Michael Zeiler** of [GreatAmericanEclipse.com](http://GreatAmericanEclipse.com) will give a tour of the path of totality through detailed maps and animations. A number of interesting eclipse viewing sites across the nation will be highlighted with special attention to southern Illinois and the surrounding region. Michael will also discuss the path of the April 8, 2024 total solar eclipse.

**Charles Fulco** is an astronomy teacher and the former Planetarium and Space Sciences Director at Port Chester (NY) Public Schools, and currently a curriculum writer and teacher development specialist. He is also the Local Area Director in Westchester County for the International Dark-Sky Assoc. and a frequent lecturer on light pollution. As a member of the American Astronomical Society's 2017 U.S. Total Solar Eclipse Task Force, he has been promoting educational and public eclipse awareness to school districts, organizations and municipalities along the path of totality. As a NASA Solar System Ambassador, he participated in a Northrup-Grumman Zero-Gravity Flight of Discovery, and regularly attends and presents at NASA, NSTA and other workshops and conferences across the country. Fulco has observed total solar eclipses on four continents, and remains an active "sidewalk astronomer," promoting astronomy and dark skies wherever and whenever he can.

**Mike Kentrianakis** is the American Astronomical Society's Solar Eclipse Project Manager for the eclipse of 2017. He is a former technical manager for CBS News' network and affiliate divisions. Since 1979, he has partaken in 10 total, 4 annular and 3 partial solar eclipse scientific expeditions worldwide. He has been a consultant of astronomical news to local and national media outlets and produced two eclipse documentary films. He also joins in public outreach observing events as a member of the Amateur Astronomers Association of New York.

**Dan McGlaun** is a veteran eclipse chaser, having experienced totality eleven times since his first eclipse in 1991. Dan manages and maintains "Eclipse2017.org, inc.", which has as its primary mission the goal of promoting the safe and enjoyable viewing of the August 21, 2017 eclipse in the United States, working with local and national agencies and organizations to ensure that complete and accurate information is gathered and distributed to the masses, aiding and support their preparations for traveling to and within the USA in the days and weeks leading up to the eclipse. Dan matriculated at Purdue University, and gained an educational background in Mathematics, Computer Science, and Electrical Engineering. He holds a High School-level teacher's license for Math, and is actively involved in private math tutoring for students at all levels. He is also a contract editorial reviewer for many mathematical publications within the famous "...for Dummies" series of instructional materials.

**Luca Quaglia** is an Italian and New Zealander, holds a Ph.D. in Physics and is currently pursuing a Master in Financial Engineering in New York. He is passionate about total solar eclipses and has travelled to seven of them. He is interested in eclipse mathematics (eclipse predictions, precise computations of long canons, eclipse periodicities) and in the collection of timing data at solar eclipses.

**Cinnamon Wheeles-Smith** joined the Carbondale Tourism staff as the Executive Director in 2012. She is a Carbondale native, and a member of the Southern Illinois Eclipse 2017 - 2024 steering committee.

**Additional Speakers Include:**

Taryn Mason, The Alder Plentarium  
Lou Mayo, NASA Eclipse 2017  
Xavier Jubier

**Register online at:** <http://conferenceservices.siu.edu/conferences/eclipse-workshop.html>

\*Food services options will be available both days on the first floor of the Student Center.

\*Also available for purchase at the conference will be 2017 Eclipse Posters and Eclipse Viewing Glasses. Please see below for samples of these items.

**Southern Illinois Eclipse Collector's Set.** This collectible set of matching Southern Illinois Eclipse glasses and poster is available for presale to public conference attendees. Your set of one poster and two glasses will be available for pickup at SIU Carbondale on Friday, June 10, 2016 during the American Astronomical Society Eclipse 2017 conference public session. The poster designer, Tyler Nordgren will be available to sign posters at the conference. Poster is 12" X 18" printed on semi-glossy cover stock.

