

# 2019 MIDSOUTH STAR GAZE & ASTRONOMY CONFERENCE SCHEDULE

## Wednesday: April 3

Setting Up, Solar Observing, Fellowship, Sightseeing  
Sunset-Until: Observing

## Thursday: April 4

9:00 am: Coffee and snacks in the classroom

10:00am-4pm with a lunch break in between: Jon Talbot Astrophotography Workshop.

**PLEASE NOTE!** *This workshop has an additional \$40 fee that is separate from Star Gaze registration and lodging. You will need to email Jon Talbot directly at: [hurricane4@att.net](mailto:hurricane4@att.net) before March 8, 2019 to sign up and get additional details. He will collect this additional \$40 fee at the door during the Star Gaze.*

12:00pm: Lunch on your own (*Council House Café*)

1:00pm: Solar Observing, Fellowship, Sightseeing

5:00 pm: Supper on your own (*Council House Café*)

Sunset-Until: Observing

## Friday: April 5

9:00 am: Coffee and snacks in the classroom

Solar Observing, Fellowship, Sightseeing

12:00pm: Lunch on your own (*Council House Café*)

3:00 pm: Lecture: Dr. William Keel, "Revisiting The History of Galaxies - Inside & Outside".

5:00 pm Supper on your own (*Council House Café*)

7:30 pm: Lecture: "Sky Lore in the Planetarium" with Dave Teske

Sunset-Until: Observing

## Saturday: April 6

Solar Observing, Fellowship, Sightseeing

9:00 am: Coffee and snacks in the classroom

12:00pm: Lunch on your own (*Council House Café*)

1:30pm: Lecture, "Questar at the Winter Star Party"

3:00 pm: Lecture: Dr. William Keel, "What's in a (*Celestial*) Name?"

5:00 pm: Supper on your own (*Council House Café*)

Sunset-Until: Observing

*Please note: The French Camp Academy Lodge has changed its focus and is no longer serving meals. However, there are a number of restaurants and stores with a deli including the Council House Café near the observatory and within a half hour of French Camp.*

## Lecture Abstracts

### Dr. William C. Keel

Galaxy Researcher, Professor, Physics and Astronomy, University of Alabama

#### “Revisiting The History of Galaxies - Inside & Outside”

New technologies continue to bring a flood of data on the history of galaxies, often awaiting our understanding to catch up. Special challenges have been framed by evidence for billion-solar-mass black holes in quasars very early in cosmic time, infrared data on how much of starbirth has long been completely hidden from our view, and both spectroscopy and simulation results on the importance of the circumgalactic gas. Many of the atoms in our bodies have spent a lot of their time completely outside the Milky Way. I will describe progress and outstanding questions, some likely to be addressed by new facilities such as the James Webb Space Telescope, upgraded ALMA, next-generation VLA, and Square Kilometer Array.

#### “What’s in a *(Celestial)* Name?”

The Sea of Tranquility. Zappafrank. ‘Oumuamua. Przybilski’s Star. Hanny’s Voorwerp. Things in the Universe don’t care what we call them, but we need names for memory and communication, names which can say a lot about us and our priorities. From craters on the moon and asteroids to rocks on Mars, stars and clouds in deep space, examine when and how astronomers have assigned (and argued over) names. We’ll see how Puck, Erebor, and (Paul) McCartney are internationally agreed, but not so much Cthulhu, Mordor, and Ultima Thule.

#### **Bio:**

*Dr. Keel is a galaxy research astronomer from the University of Alabama. He has conducted work on some of the most powerful telescopes in the world such as the Hubble Space Telescope, Kitt Peak, Cerro Tololo, La Palma, La Silla, the MMT, the 6-meter Bolshoi Teleskop Azimutal'nyi, the IRTF, and the VLA. He has also used data from Voyager 2, IUE, IRAS, Einstein, ROSAT, ISO, UIT, Chandra, GALEX, and FUSE and published two books - The Road to Galaxy Formation and The Sky at Einstein's Feet.*

## Jon Talbot

"Retired Hurricane Hunter" and Astrophotographer

### **Lecture Abstract: "Astrophotography Workshop"**

This year [Jon Talbot](#) astrophotographer and retired "Hurricane Hunter" will be presenting an astrophotography workshop during the Midsouth Star Gaze and Astronomy Conference! It will be scheduled on Thursday April 4, 2019, 10:00am-4:00pm with a break for lunch. This workshop will cover the basic fundamentals of taking raw data (*CCD or DSLR*) and making a color image out of it using PixInsight. Individuals wishing to participate in this workshop will need their own laptop or computer. It has to have the latest version of PixInsight on it. Those who do not own PixInsight but want to try it before deciding to buy can download a 30-day trial and install from <http://pixinsight.com/> This should be done 1-2 weeks prior to the class because there are a couple of days wait for the trial license.

**PLEASE NOTE!** This workshop has an additional \$40 fee that is separate from Star Gaze registration and lodging. Jon will collect this additional \$40 fee at the door during the Star Gaze. You will need to email Jon directly at: [hurricane4@att.net](mailto:hurricane4@att.net) before March 8, 2019 to sign up and get any additional details.

### **Bio:**

*Jon Talbot lives several miles north of the Gulf of Mexico in Ocean Springs, MS. By day, he is the Chief Flight Meteorologist with the Air Force Reserve "Hurricane Hunters" located at Keesler AFB MS. His job certainly quells his thirst for excitement. He has flown through more than 150 Hurricanes and Tropical Cyclones during the last 25 years providing crucial data to the National Hurricane Center in Miami FL.*

## Dave Teske

Retired Science Teacher and Solar-Lunar Astronomer and Astrophotographer

Lecture: "Sky Lore in the Planetarium"

### **Bio:**

*David Teske is a long-time amateur astronomer who has presented programs at Rainwater Observatory since 1990. He has worked as the assistant director at the Alworth Planetarium in Duluth, Minnesota, the assistant director at the Davis Planetarium in Jackson, Mississippi, and has presented numerous astronomy programs at Rainwater Observatory, nature centers, and schools. He is recently retired as a science teacher who has been the recipient of awards for teaching including STAR teacher, and recognition from NASA and the Air Force Association for teaching. NASA awarded Teske for Mission Home, for incorporating space science applications to Earthly applications. The Air Force Association awarded Teske the teacher of the year for his teaching of air and space sciences in middle school.*

## **Fred Rains**

"Birmingham Astronomical Society"

### **Lecture Abstract: "The Questar Telescope"**

This year Fred will be doing a presentation on how to use the Questar and will include polar alignment in the day or night, those wonderful old-time setting circles, Powerguide II features, using the Questar finder, and the limitations to the South. This followed by a brief show and tell.

### **Bio:**

*Fred Rains was born in Birmingham, Alabama and graduated from the University of Alabama at Birmingham in 1976 with a BSE in Engineering. He has worked in the Electric Utility Industry for over 40 years and is a Licensed Professional Engineer. He has been a star gazer for as long as he can remember, is active in the Birmingham Astronomical Society as Outreach Coordinator, and has taught after-hours courses on Amateur Astronomy at Samford University. He believes you should observe the sky with what you have from where you are and see what you can.*