

## Workshop Registration

Name: \_\_\_\_\_

School Name: \_\_\_\_\_

Grade Level: \_\_\_\_\_ Subject Area: \_\_\_\_\_

### Contact Information

Street Address: \_\_\_\_\_

\_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Email: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

### Check the events you will attend:

#### \_\_ AAVSO Opening Reception and Talk

October 18<sup>th</sup> from 7:00pm–9:00pm  
*Personal Stories from Inside Mission Control Center (Apollo 50th Anniversary)*, Gordon Myers

#### \_\_ AAVSO Meeting, Day 1

October 19<sup>th</sup> from 9:00am–12:00pm  
Talks by amateur and professional astronomers

#### \_\_ SDSS Plate Workshop (lunch included)

October 19<sup>th</sup> from 12:00pm–1:30pm

#### \_\_ Planning a Visual Observing Program

October 19<sup>th</sup> from 1:30pm–2:30pm

### Send completed registration to:

Lindsay Ward, AAVSO  
49 Bay State Road, Cambridge, MA 02138 or  
EMAIL: [lward@aauso.org](mailto:lward@aauso.org)

## Workshop Leaders

### Dr. Karen Kinemuchi APO Support Astronomer

Dr. Kinemuchi works with the Sloan Digital Sky Survey (SDSS) 2.5m telescope. She is a research scientist interested in RR Lyrae variable stars to study the evolution and structure of the Milky Way Galaxy. She received her Ph.D. from Michigan State University in 2004, and she has observed at many observatories in the US and Chile, South America. Dr. Kinemuchi splits her time between Apache Point Observatory and the Department of Astronomy at New Mexico State University in Las Cruces.

### Dr. Stella Kafka CEO, AAVSO

Dr. Kafka is the CEO of the American Association of Variable Star Observers (AAVSO). She received her Ph.D. from Indiana University Bloomington, and has held a series of postdoctoral positions and fellowships at Cerro Tololo Inter-American Observatory (CTIO) in Chile, Caltech, and as a NASA Astrobiology Institute Fellow at the Carnegie Institution of Washington. In addition to her academic positions, she has worked in the American Institute of Physics Publishing group. Dr. Kafka has extensive experience gathering, reducing, and analyzing photometric and spectroscopic data.

### Katie Grabowski APO Telescope Operations Specialist

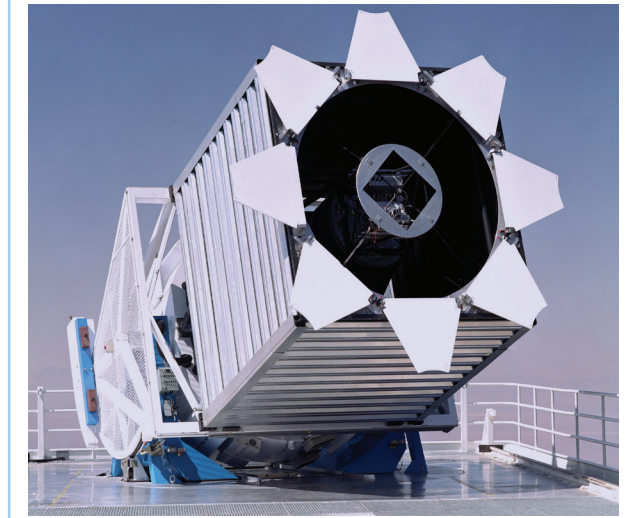
Katie Grabowski is a telescope operations specialist on the Sloan Digital Sky Survey (SDSS) 2.5m telescope at Apache Point Observatory in Sunspot, NM. She works with local organizations on outreach opportunities. She received her MS/BS in Physics at Rensselaer Polytechnic Institute, and has worked with the Dark Energy Survey at Fermi National Accelerator Laboratory.

## American Association of Variable Star Observers

in collaboration with

Apache Point Observatory

## TEACHER WORKSHOP



Sloan Digital Sky Survey (SDSS)  
Plate Workshop  
October 19, 2019  
Las Cruces, New Mexico



## Who are the Organizers

### About the AAVSO

The American Association of Variable Star Observers (AAVSO) is an international nonprofit organization of citizen astronomers and professional astronomers who are interested in stars that change in brightness—variable stars.

From its earliest days, AAVSO members have included some of the most prolific and influential astronomers of the 20<sup>th</sup> and 21<sup>st</sup> centuries, both professional and non-professional.

### About Apache Point Observatory

The Apache Point Observatory is an astronomical observatory located in the Sacramento Mountains in Sunspot, New Mexico, approximately 18 miles south of Cloudcroft. The observatory is operated by New Mexico State University and owned by the Astrophysical Research Consortium.

### Who are AAVSO Members?

- ★ A citizen astronomer—an individual who supports the AAVSO mission above and beyond the contribution of data
- ★ A professional astronomer—an individual using AAVSO data and services, and supporting our mission to encourage variable star research
- ★ An educator—someone who shares variable star astronomy with students
- ★ A student—a young person just beginning a career in the sciences

Community



Explore



Education



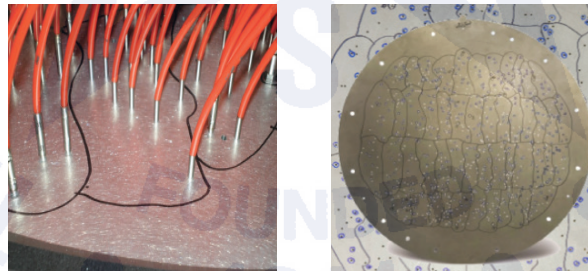
## About the Workshop

The Sloan Digital Sky Survey (SDSS) revolutionized how astronomers study the universe. The SDSS telescope uses a combination of fiber optics and aluminum plates (pictured on the front of this brochure) to observe up to a thousand celestial objects at the same time.

SDSS has observed over ten thousand plates, and re-purposed them for classroom activities. We will walk through the Voyages resources, an on-line collection of curriculum exercises on how to use the plates and SDSS data to teach STEM concepts, emphasizing astronomy.

The Voyages activities are designed for curricula at the middle school through college levels. This workshop is for educators and school teachers who wish to bring an SDSS plate into their classroom.

For more information on SDSS Voyages:  
<https://www.sdss.org/education/>



Astrophysical Research Consortium  
to design, construct, and operate the Apache Point Observatory



## Benefits to Teachers

- ▶ Instructional workshop taught by Apache Point Observatory Staff
- ▶ SDSS plate for classroom use
- ▶ Access to SDSS online curricula resources (middle school–college levels)
- ▶ Complimentary registration to attend:
  - ▷ Opening Reception
  - ▷ Annual Meeting talks, Day 1
  - ▷ Planning a Visual Observing Program
- ▶ 1-year AAVSO Membership

### Contact Information

*For questions regarding the AAVSO and teacher sponsorships, please contact:*

Lindsay Ward

Email: [lward@aavso.org](mailto:lward@aavso.org)

Phone: (617) 354-0484 x 105

[www.aavso.org](http://www.aavso.org)

*For questions regarding the SDSS Plate Workshop curriculum, please contact:*

Katie Grabowski

Email: [kgrabowski@apo.nmsu.edu](mailto:kgrabowski@apo.nmsu.edu)

Let's connect and explore

