

# **EXES Teacher Associates Present a Paper at the January 1999 American Astronomical Society Meeting in Austin Texas**

EMBARGO

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## **TEXAS TEACHERS TO FLY ON RESEARCH AIRPLANE in 2002**

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A team of astronomers from The University of Texas at Austin are involving a group of teachers in the development for a scientific instrument for SOFIA (the Stratospheric Observatory for Infrared Astronomy). The research and development team is led by John Lacy while the teacher involvement is led by Mary Kay Hemenway. Other astronomers are Daniel Jaffe and Matt Richter. The teachers include:

David Castro of Westwood HS in Round Rock, TX

Karen Green of Lago Vista HS in Lago Vista, TX

Jody Harkrider of Irving MS in San Antonio, TX

Welf Jentsch of Burnet MS in Burnet, TX

Carol Lee Lutsinger of Martin Accelerated School in Brownsville, TX

Shannon Miller of Llano Junior High in Llano, TX

Earleen Noid of Dobie MS in Austin, TX

Richard Penn of Lago Vista HS in Lago Vista, TX

Steve Scott of Gonzales HS in Gonzales, TX

Lorna Shepherd of Del Valle HS in Del Valle, TX

Robert Suder of the Science Academy of LBJ HS in Austin, TX

MJ Tykoski of Dripping Springs HS in Dripping Springs, TX

Marsha Willis of Grisham MS in Round Rock, TX

The astronomers and teachers are presenting a summary of their project today to the American Astronomical Society meeting in Austin, TX. The teachers first met in January 1998, and plan to continue to meet six times a year until they, and their instrument, fly on SOFIA.

SOFIA will use a 747 airplane to take a 2.5 meter telescope above most of the water vapor in Earth's atmosphere. Water vapor prohibits most infrared radiation from reaching ground-based telescopes. The Texas team is developing an infrared sensitive spectrograph named EXES (Echelon Cross Echelle Spectrograph). SOFIA is scheduled to see first light in late 2001. The start of regular operations is scheduled for mid-2002.

Involving teachers from the start of the project means that they can learn both technology and science as it develops. The teachers meet six times per year for hands-on activities on subjects such as optics and spectroscopy, computer ray-tracing, and science goals of the future observatory; they also perform activities that can be adapted for their classroom use. The participating astronomers interact in the sessions at the University and on field trips. Part of each meeting is an update on the progress and problems that have occurred since the previous meeting.

"Even teachers with an excellent science background rarely have an opportunity to learn first-hand about instrument development. From Gantt charts to drill press and lathes, we plan to introduce the teachers to a full range of development tools so that they'll share 'ownership' of EXES when they fly on SOFIA." says Dr. Mary Kay Hemenway, Senior Lecturer at The University of Texas at Austin.

This work is supported by NASA through a contract with USRA for the development and operation of SOFIA.

For More Information:

Dr. John Lacy (512-471-1469, [lacy@danny.as.utexas.edu](mailto:lacy@danny.as.utexas.edu))

Dr. Mary Kay Hemenway (512-471-1309, [marykay@astro.as.utexas.edu](mailto:marykay@astro.as.utexas.edu))

PHOTO OPPORTUNITY:

1:45 PM CST, Wednesday, January 6, Austin Convention Center, Exhibit Hall 1

Photo Opportunity with Texas school teachers selected for an outreach and training program involving NASA's future Stratospheric Observatory for Infrared Astronomy ("SOFIA," a large telescope in an aircraft, now under construction in Waco), at the SOFIA display in Exhibit Hall I, Austin Convention Center, 1:45 PM, Wednesday, Jan. 6.

Teachers from Round Rock, Lago Vista, San Antonio, Burnet, Brownsville, Llano, Austin, Gonzales, Del Valle, and Dripping Springs, with training program leader, Dr. Mary Kay Hemenway, Senior Lecturer in the Department of Astronomy, University of Texas at Austin.