



*John Paul Wefel*

April 28, 1944 — March 30, 2025

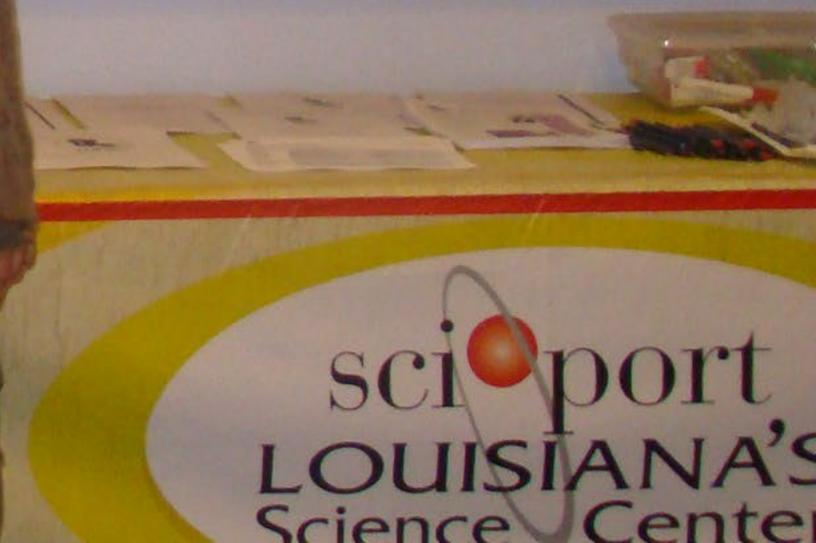
*T. Gregory Guzik*

AUGUST 21, 1952 - AUGUST 19, 2025





01:15-2:00pm	Sci-Port: Science Program Demonstration
02:00-02:45pm	Intro to new NCAH Partnership & HEP Update
02:45-03:00pm	<b>BREAK</b>
03:00-03:45pm	Tentative Title: 50 Scholars at Timbuktu Academy
03:45-05:00pm	Updates from Member Institutions/Discussion
06:00-08:00pm	<b>Dinner Reception</b>
	*1. Aspinco, S.200, R. Green, L. Lach, A. L. Smith, J. Smith, W. Wall, G. W. Wall, A. T. Smith, R. H. Smith
<b>Saturday, October 5th</b>	
08:00-09:00am	<b>Continental Breakfast</b>
09:00-10:00am	EPSCOR Program & Technical Advisory Committee
10:00-10:15am	<b>BREAK</b>
	<b>RECONVERGE L</b>
10:15-11:00am	K-12 Program Activities
11:00-11:45am	LaACES Program Discussion
11:45-12:00pm	Closing Remarks / Next Council Mtg. Location/Agenda
12:00-01:00pm	<b>Lunch Buffet</b>
01:15-03:00pm	Student Poster Session in the Solarium









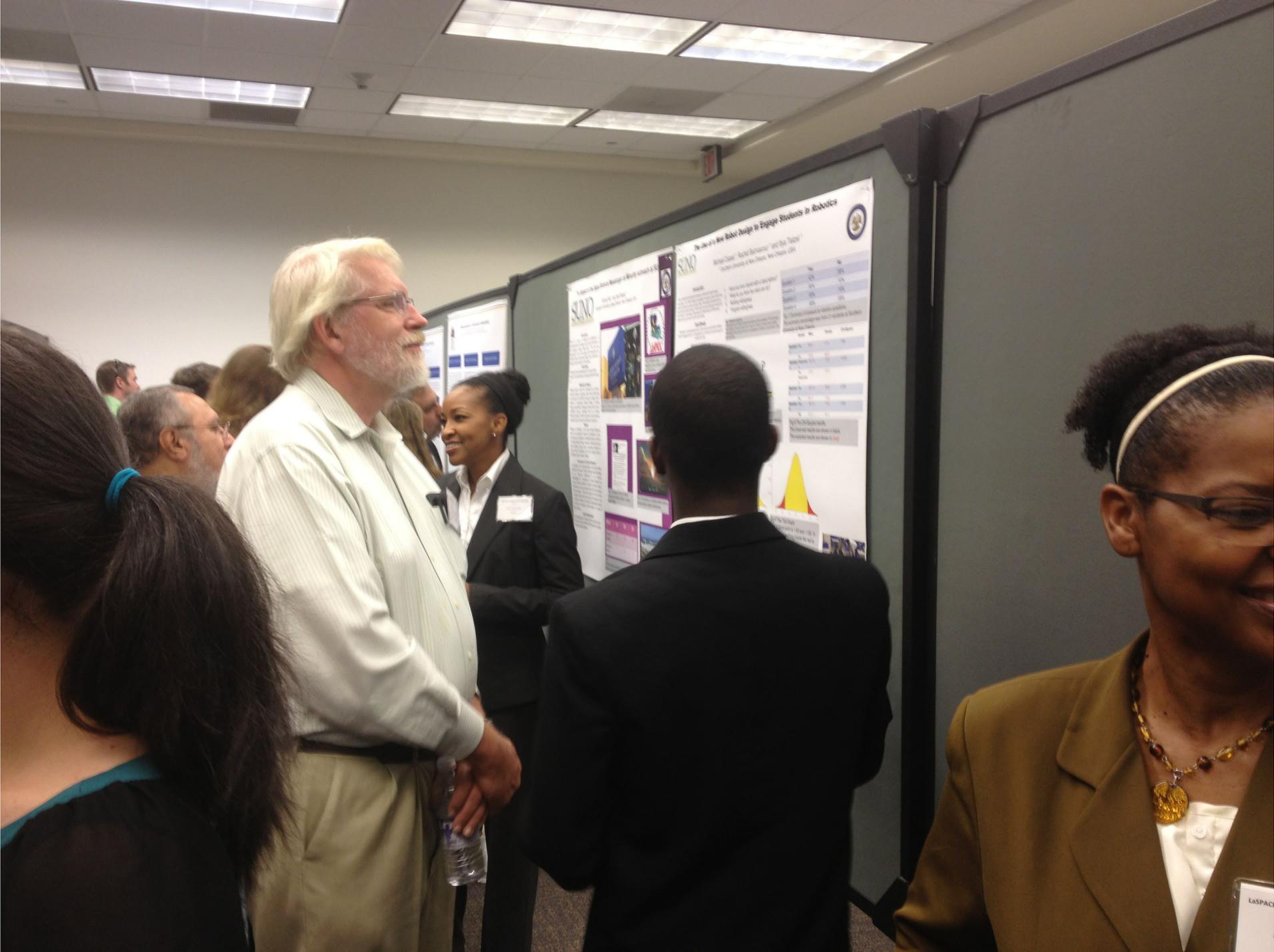




Analysis of microorganisms in  
aerosols collected between  
1.5 and 38 km

Heidi  
Christian  
Lockman





### The Use of the Robot Design to Engage Students in Robotics

Michael Green, Robert Robinson, and the Faculty  
Staten Island University of New York, New York, NY

**Abstract:** This study examines the impact of using a robot design in a classroom setting to engage students in robotics. The study was conducted in a classroom setting with 30 students. The results show that the use of a robot design significantly increased student engagement and learning outcomes.

Variable	Pre-Test	Post-Test
Engagement	60%	85%
Learning Outcomes	70%	90%
Retention	80%	95%
Self-Confidence	50%	75%

**Conclusion:** The use of a robot design in a classroom setting is an effective way to engage students in robotics and improve learning outcomes. This study provides evidence for the effectiveness of this approach and suggests that it should be used more widely in classrooms.

**Keywords:** Robotics, Student Engagement, Learning Outcomes, Retention, Self-Confidence.

LA SPAC













**John Wefel**

*For Outstanding Service*

*to the*

*National Space Grant College*

*and Fellowship Program*

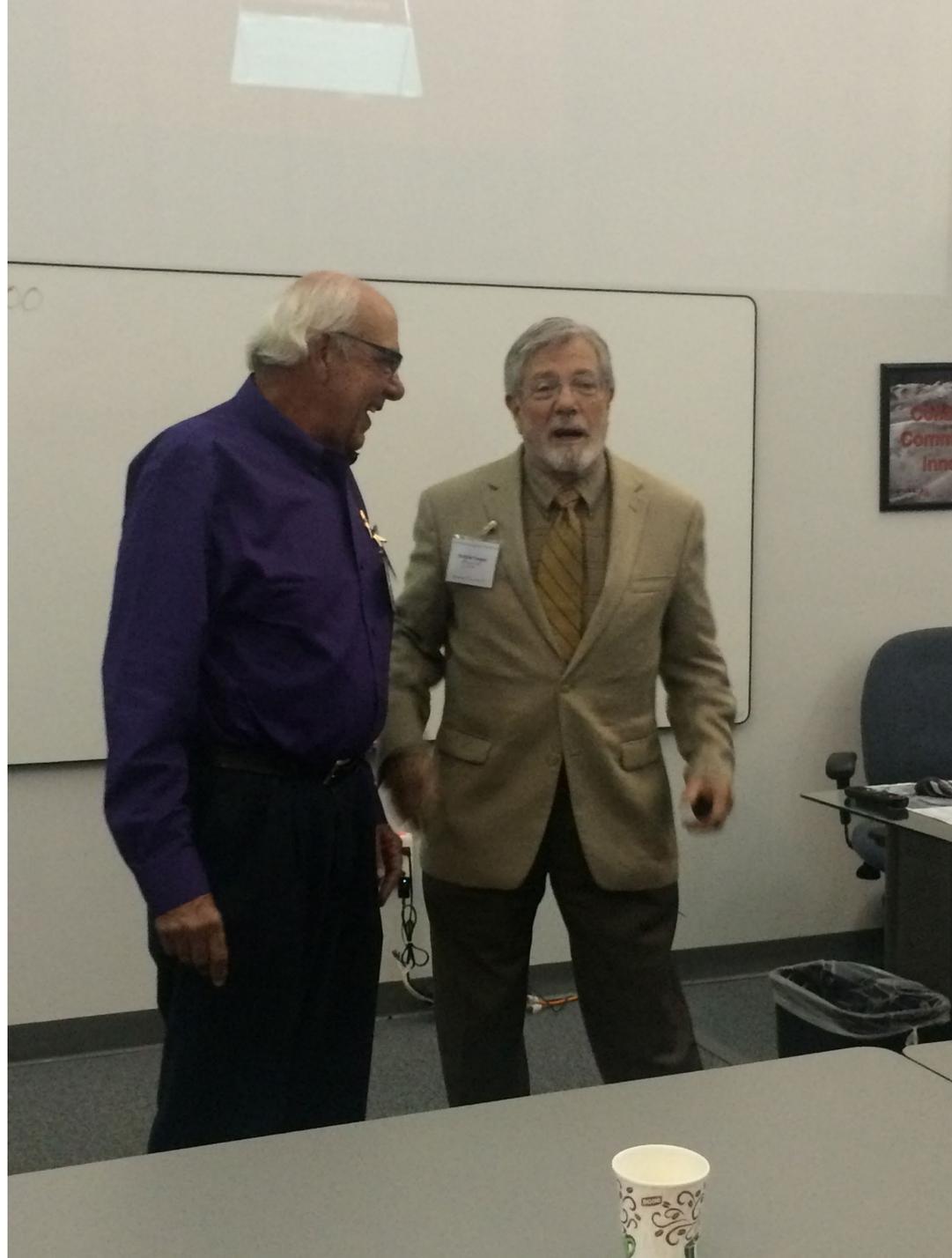
*Presented on October 23, 2014*







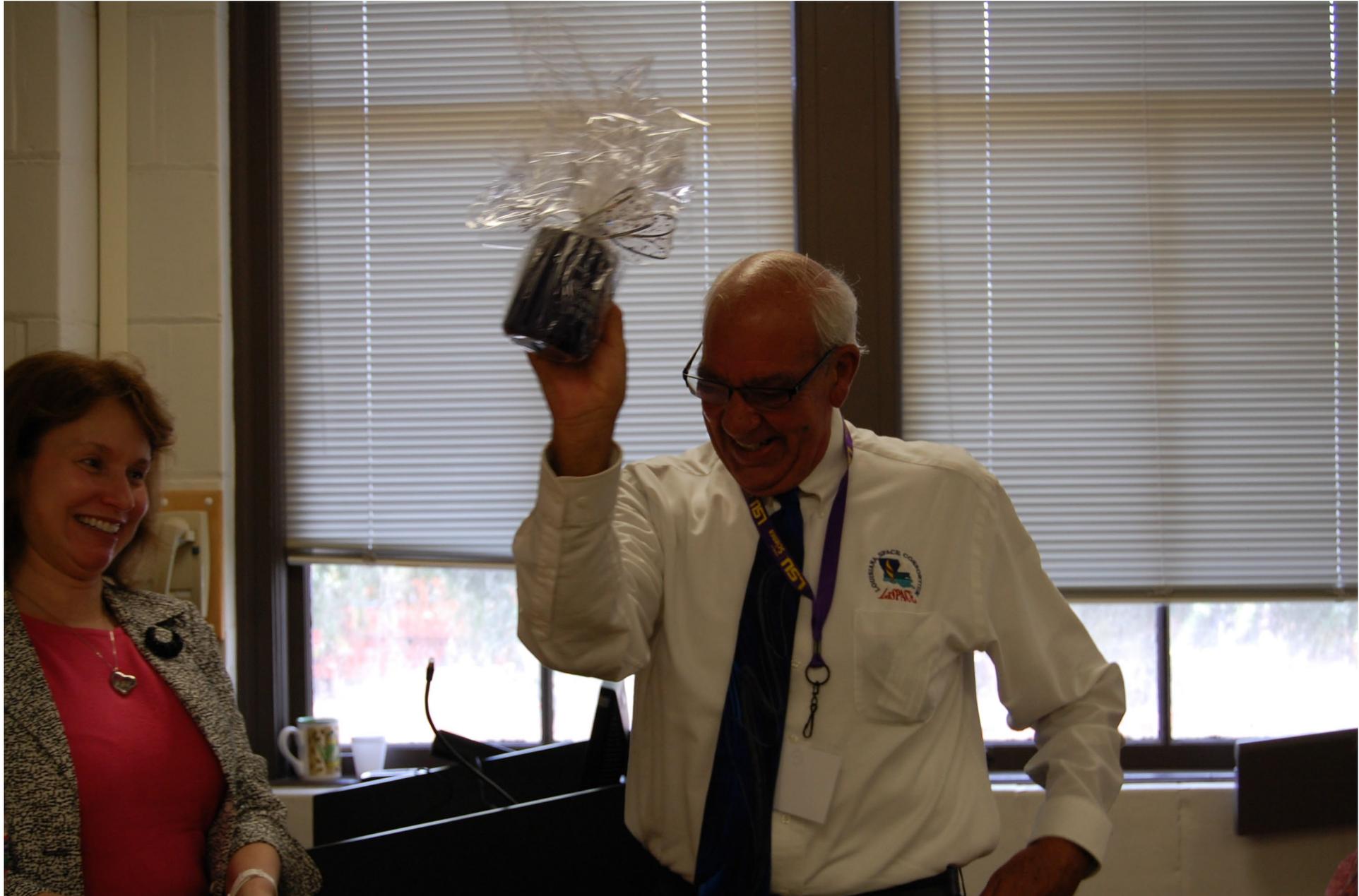








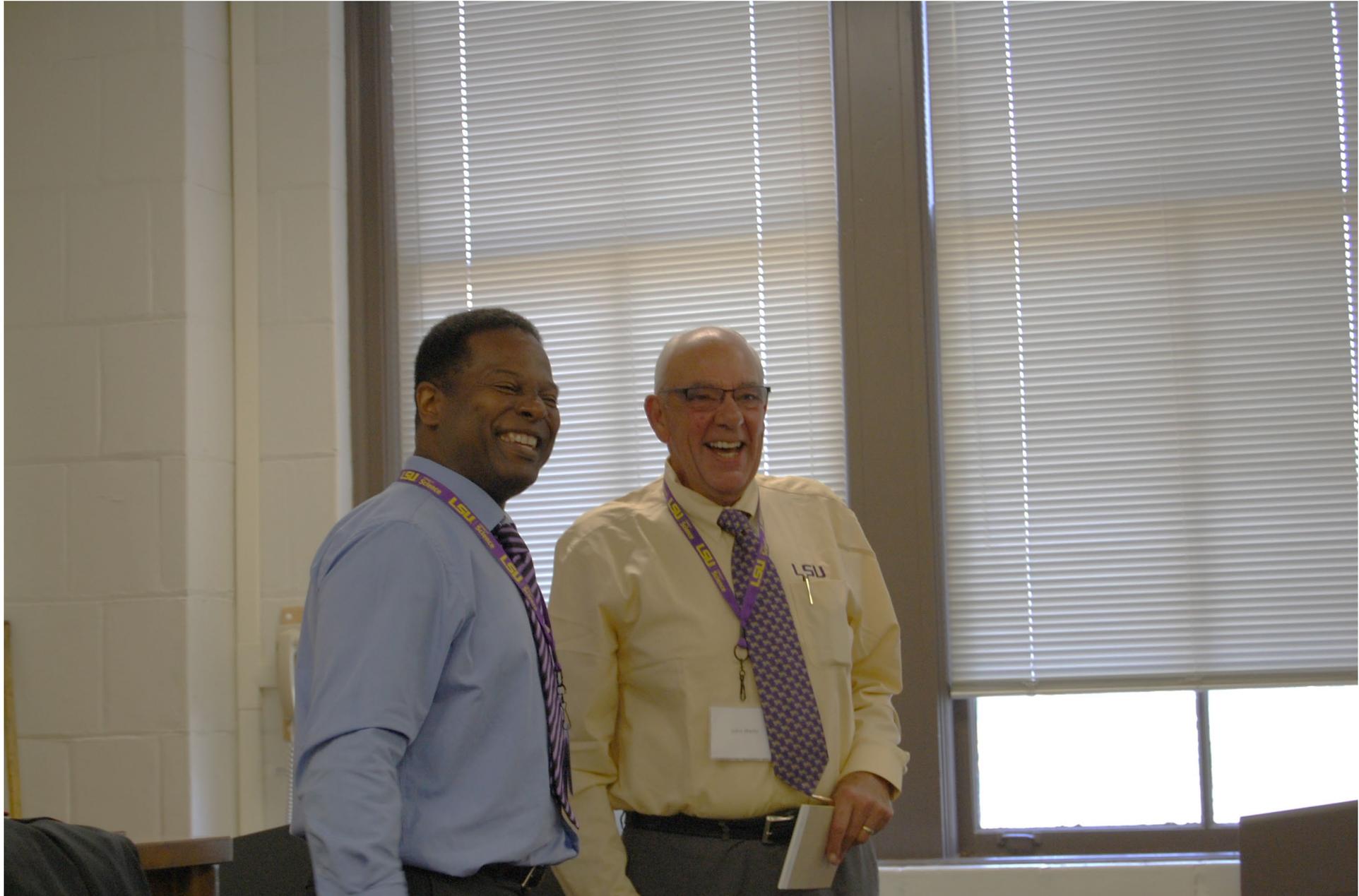








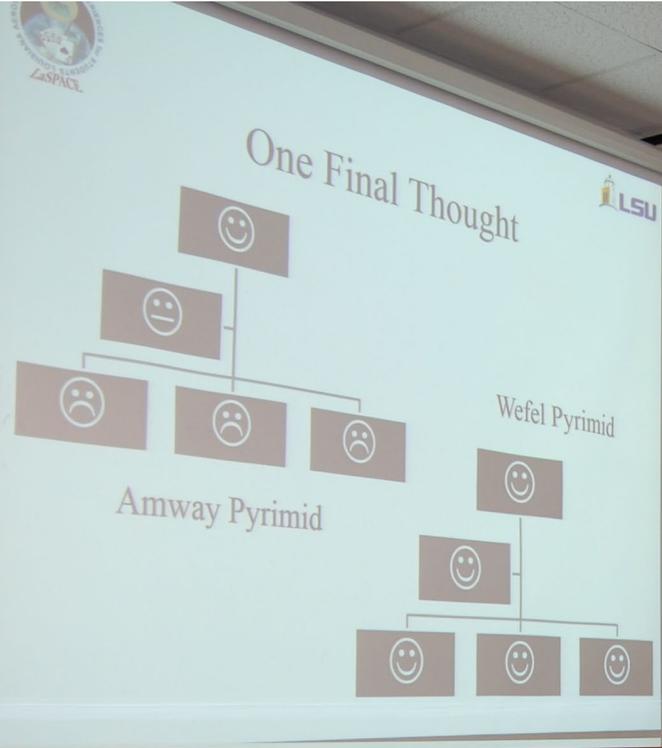








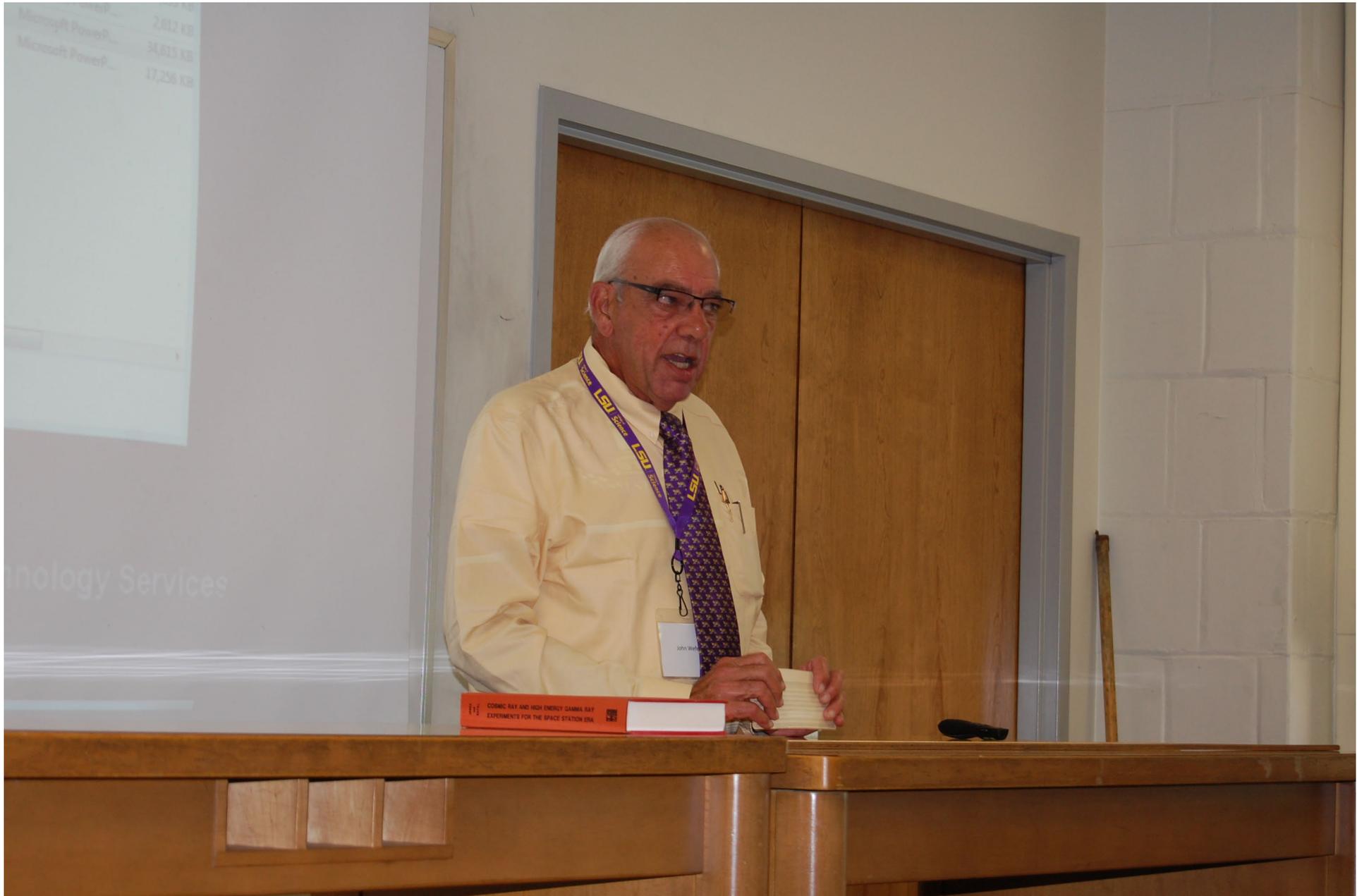




Wefel Image Upload site  
http://calet.phys.lsu.edu/wefel.php  
USER: wefel-upload  
pass: wefel  
\* can drag and drop images or use  
the upload button on menu bar  
\* do not need to install Java  
- ignore the nag bar



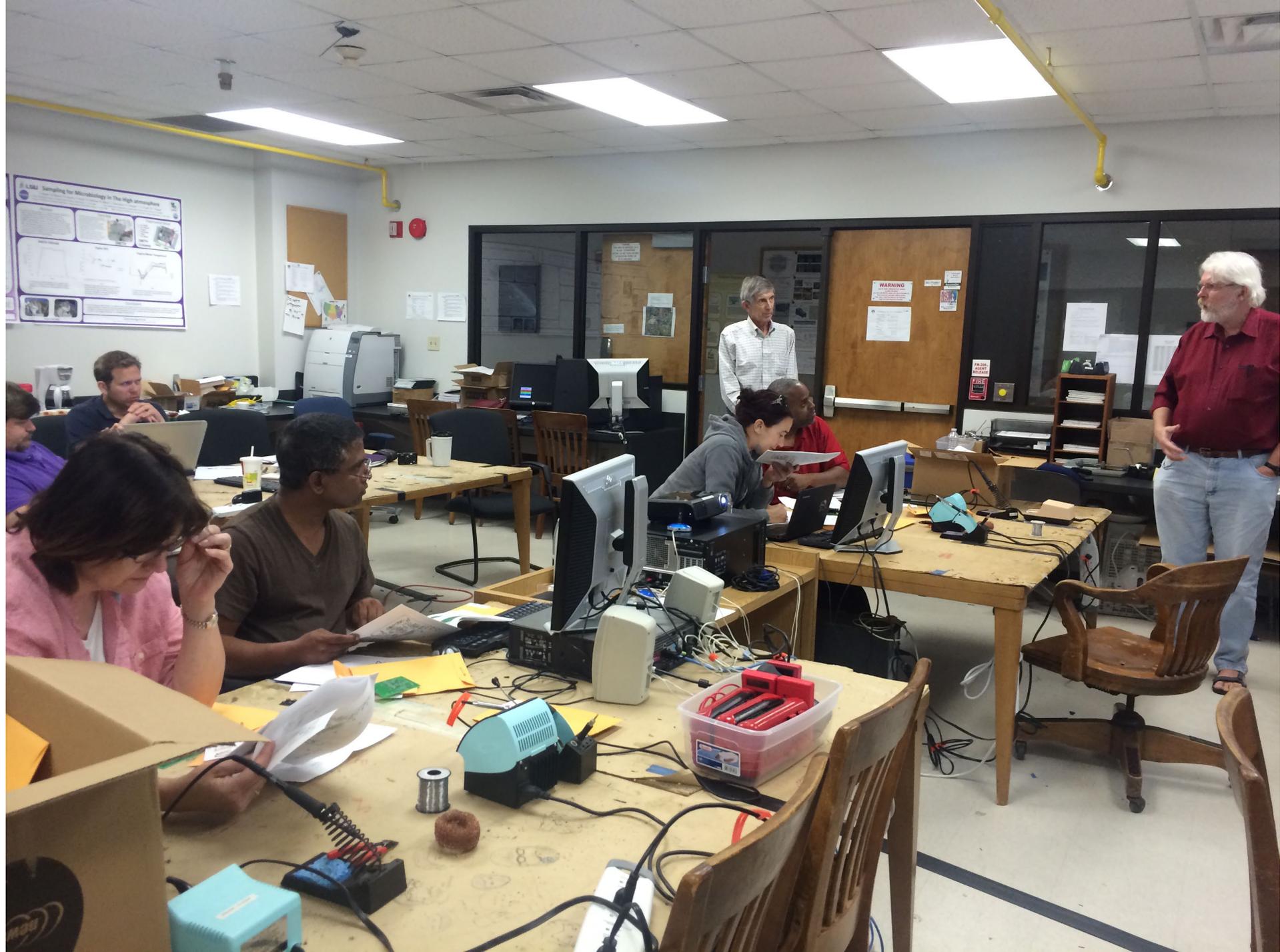






















### Radiation Measurement Apparatus (SURMA)

Abstract: This paper describes the design and construction of a radiation measurement apparatus (SURMA) for use in the laboratory. The apparatus is designed to measure the dose rate of gamma radiation from a source. It consists of a NaI(Tl) scintillation detector coupled to a photomultiplier tube (PMT) and a signal processing unit. The signal processing unit is a custom-built circuit that amplifies the signal from the PMT and converts it to a digital signal. The digital signal is then processed by a microcontroller to calculate the dose rate. The apparatus is portable and easy to use. It is suitable for use in a laboratory setting. The apparatus is also suitable for use in a field setting. It is suitable for use in a variety of applications. The apparatus is suitable for use in a variety of applications. The apparatus is suitable for use in a variety of applications.

### LSU Correlation of Gamma Flashes, Electric Fields, and Lightning Strikes (COTEL) in Balloon Payloads Developed by University and College Students

Abstract: This paper describes the design and construction of a balloon payload for the Correlation of Gamma Flashes, Electric Fields, and Lightning Strikes (COTEL) experiment. The payload is designed to measure the dose rate of gamma radiation from a source. It consists of a NaI(Tl) scintillation detector coupled to a photomultiplier tube (PMT) and a signal processing unit. The signal processing unit is a custom-built circuit that amplifies the signal from the PMT and converts it to a digital signal. The digital signal is then processed by a microcontroller to calculate the dose rate. The payload is portable and easy to use. It is suitable for use in a laboratory setting. The payload is also suitable for use in a field setting. It is suitable for use in a variety of applications. The payload is suitable for use in a variety of applications. The payload is suitable for use in a variety of applications.

### LA-SIGMA

Abstract: This paper describes the design and construction of a balloon payload for the LA-SIGMA experiment. The payload is designed to measure the dose rate of gamma radiation from a source. It consists of a NaI(Tl) scintillation detector coupled to a photomultiplier tube (PMT) and a signal processing unit. The signal processing unit is a custom-built circuit that amplifies the signal from the PMT and converts it to a digital signal. The digital signal is then processed by a microcontroller to calculate the dose rate. The payload is portable and easy to use. It is suitable for use in a laboratory setting. The payload is also suitable for use in a field setting. It is suitable for use in a variety of applications. The payload is suitable for use in a variety of applications. The payload is suitable for use in a variety of applications.



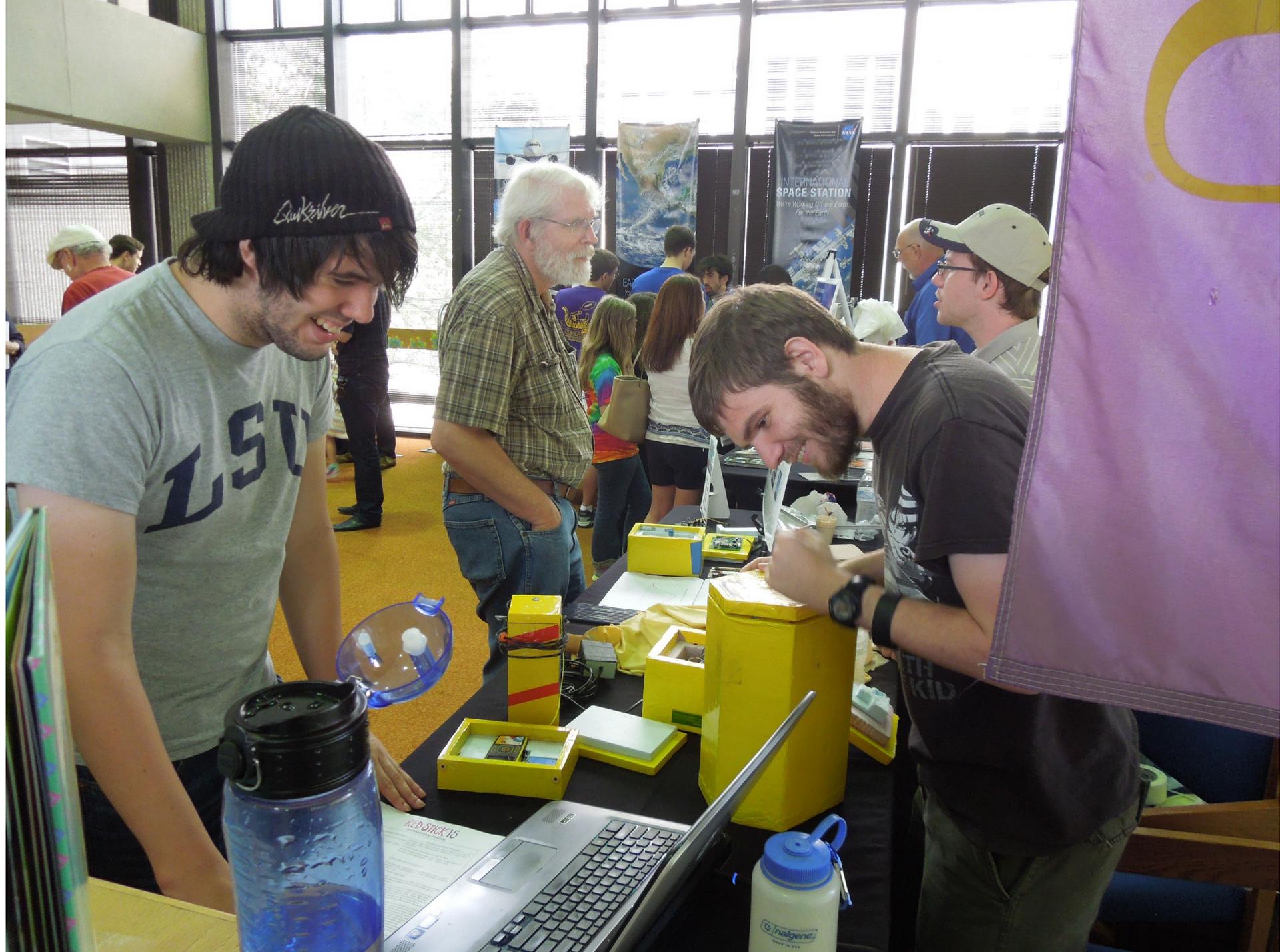




## January 2015

- Received letter of support from the La BoR formally pledging to continue to support LaSPACE with an annual cash match of \$250k per year for the Bridge Proposal (1/8)
- Colleen H. Fava visited Stennis Space Center (at the invitation of Katrina Emery) to tour Stennis and meet the new NASA Associate Administrator for the Office of Education, Donald James (1/16)
- All-hands LaSPACE teleconference to discuss the Bridge funding (1/16)
- Selected 12 student payloads for HASP 2015 (1/15)







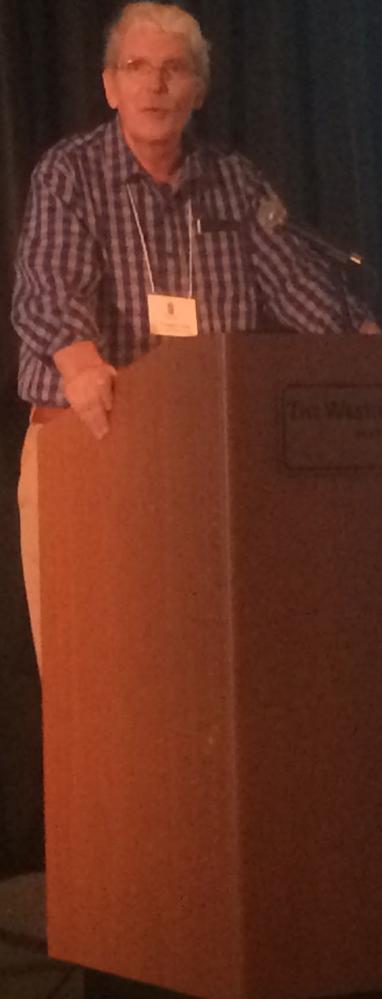
RED STICK 15  
INTERNATIONAL FESTIVAL  
Panoptic  
Moon &  
Mars  
By  
Dr. Robert Kooima

TRAINING ACADEMY ENROLLMENT  
SUPER-HERO TRAINING ACADEMY  
COMMITMENT  
MONDAY, MAY 26 THROUGH  
10 AM





A Presenta





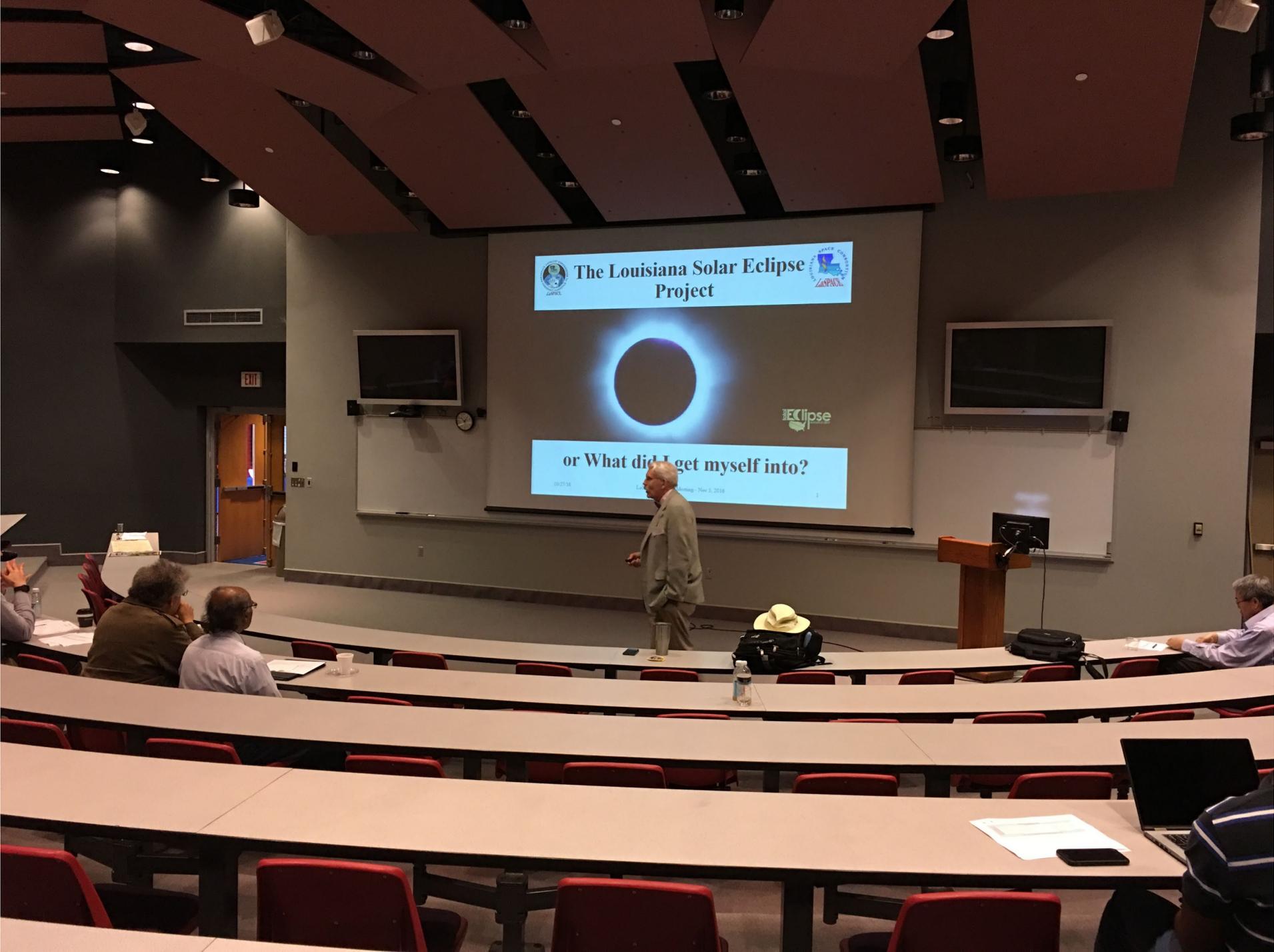


### Dec. 2015 – Jan. 2016

December 11, 2015	NASA releases FY2016 NASA EPSCoR CAN solicitation
December 18, 2015	Released NASA EPSCoR SAR solicitation
December 18, 2015	HASP 2016 applications due
December 21, 2015	NASA EPSCoR FY2016 Review Panel
January 13, 2016	Select Warner Pre-Proposal as primary for NASA EPSCoR
January 14, 2016	Solar Eclipse (SE) Payload Training workshop in Bozeman, MT (1/14 - 1/17)
<b>January 20, 2016</b>	<b>NASA requests FY2015 APD</b>
January 25, 2016	REA awards 6, RIG awards 1
January 25, 2016	Selected 13 payloads for HASP 2016
January 29, 2016	NASA released Space Grant Augmentation RFP

11/2/16 LaSPACE 2016 Council Meeting 3





The Louisiana Solar Eclipse Project



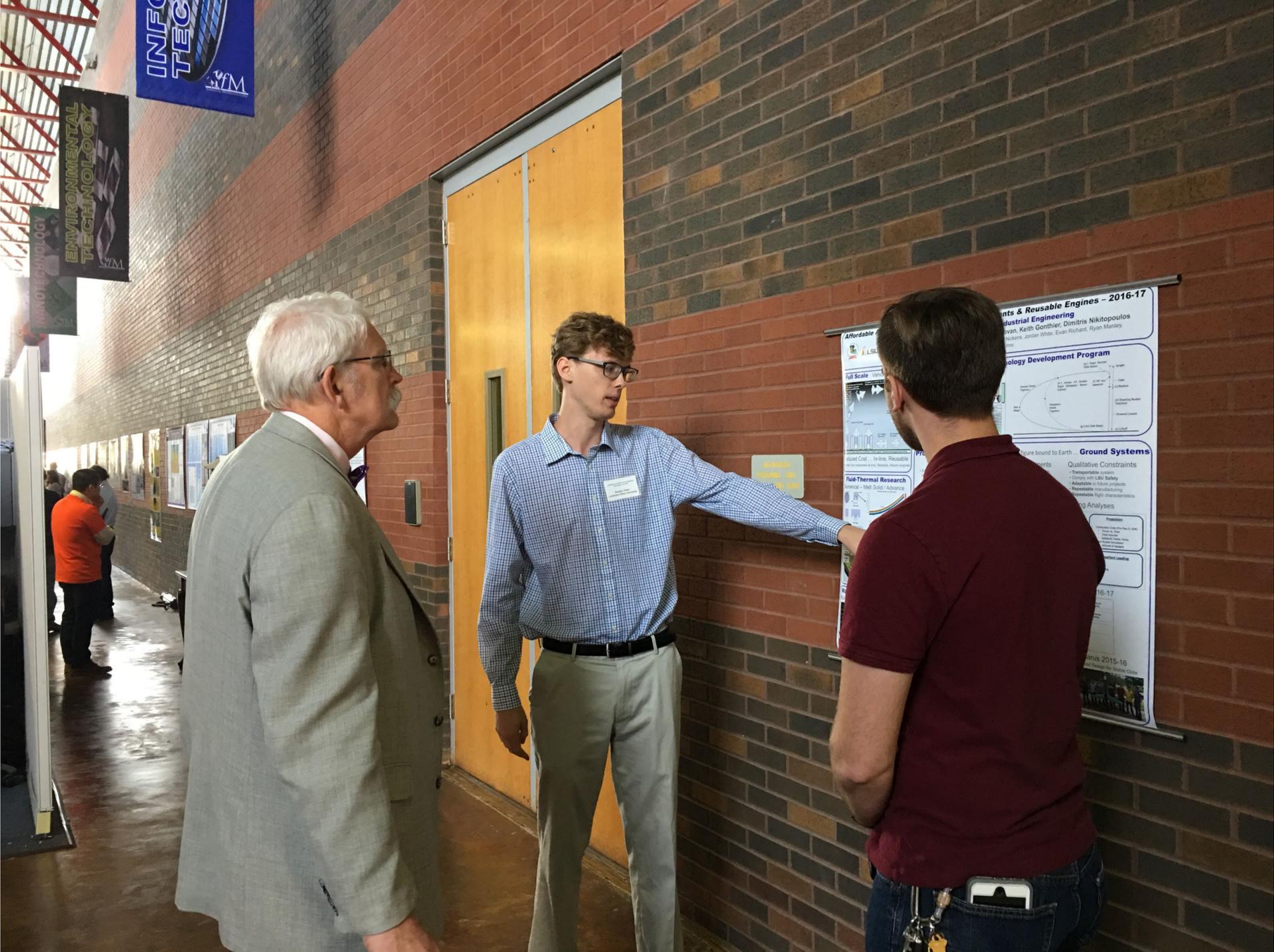
Eclipse

or What did I get myself into?

10/27/16

Friday, Nov 4, 2016

2



INTEC  
TEC  
SYM

ENVIRONMENTAL  
TECHNOLOGY  
SYM

ENVIRONMENTAL  
TECHNOLOGY  
SYM

**Reusable Engines - 2016-17**  
Industrial Engineering  
Evan, Keith Goethier, Dimitris Nikitopoulos,  
Michael, Jordan White, Evan Richard, Ryan Massey,  
2016

**Technology Development Program**

**Full Scale**

**Fluid-Thermal Research**  
Research - Meet Solid / Advance

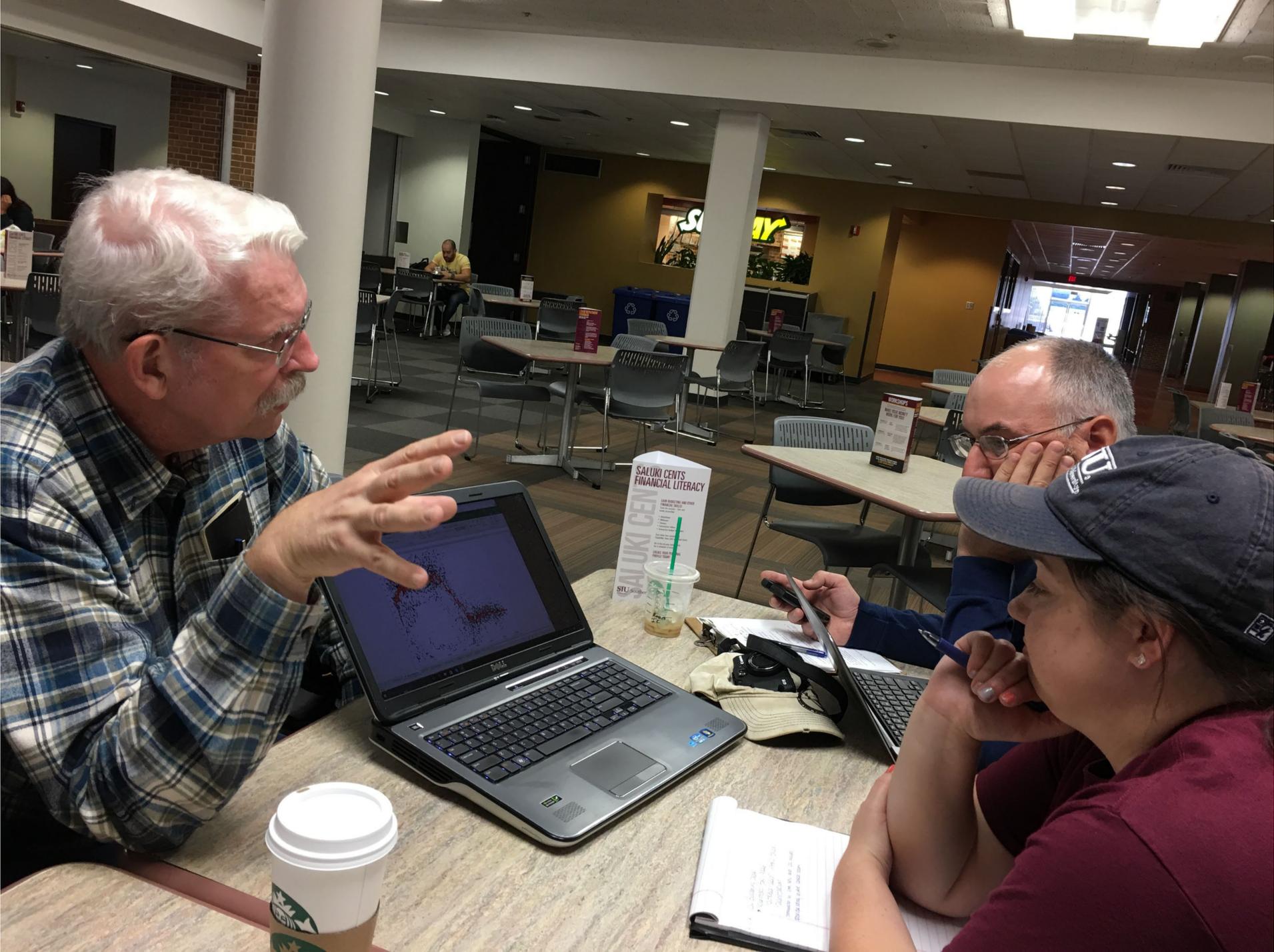
**Ground Systems**  
Figure bound to Earth  
Qualitative Constraints  
- Transportable system  
- Comply with LEO Safety  
- Adaptable to future projects  
- Reusable manufacturing  
- Reproducible flight characteristics

**Analyses**

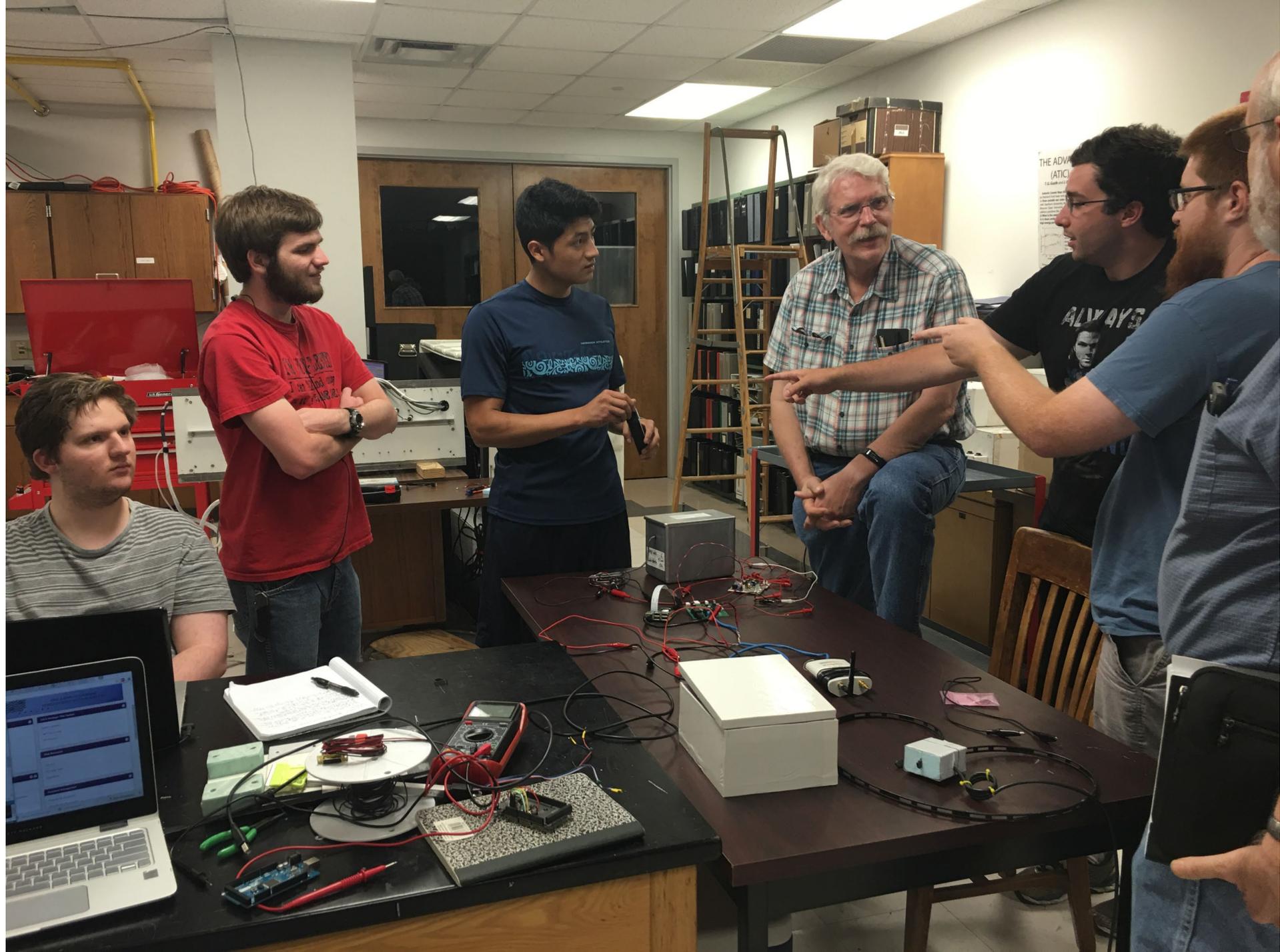
**2016-17**

**Status 2015-16**  
and ... by ...

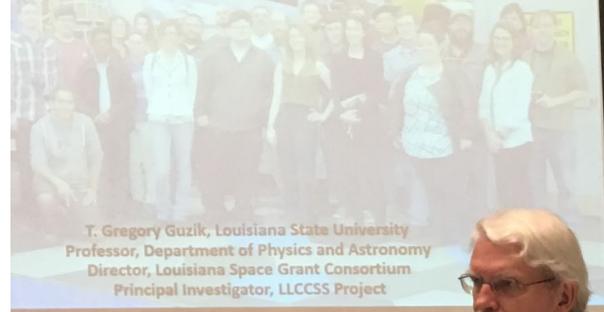








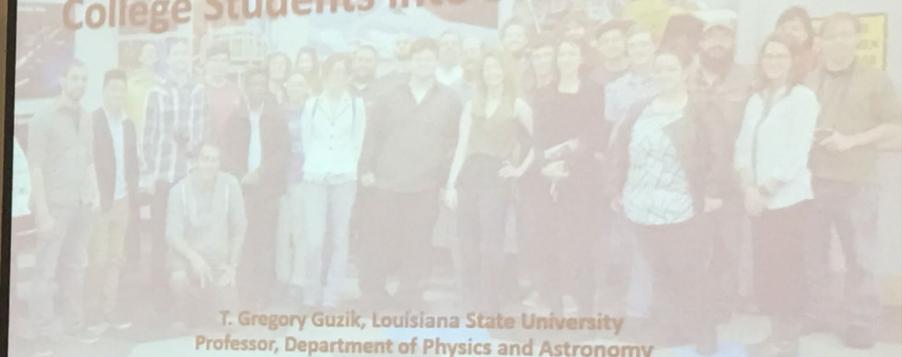
Launching Louisiana Community  
College Students into STEM (LLCCSS)



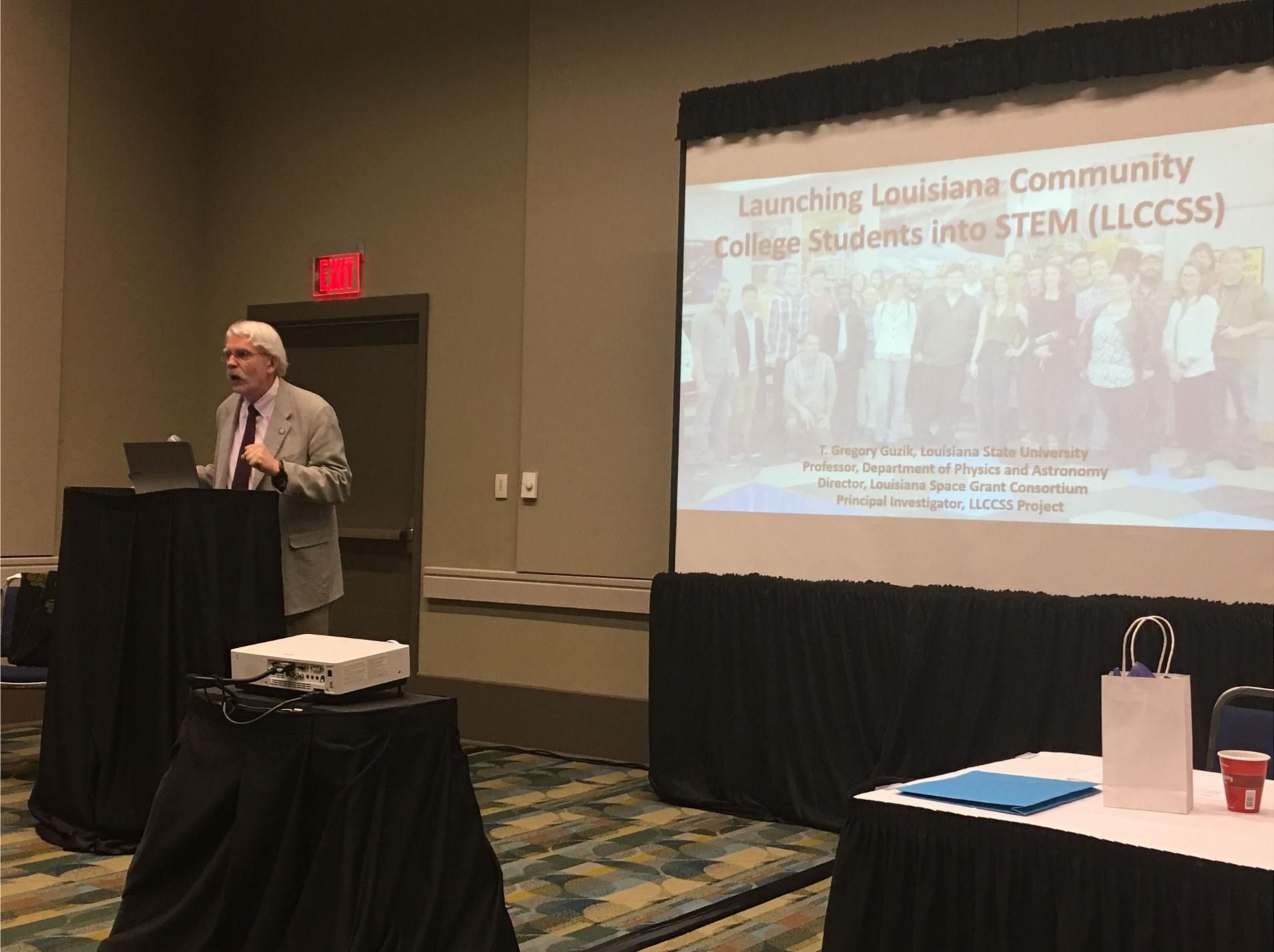
T. Gregory Guzik, Louisiana State University  
Professor, Department of Physics and Astronomy  
Director, Louisiana Space Grant Consortium  
Principal Investigator, LLCCSS Project

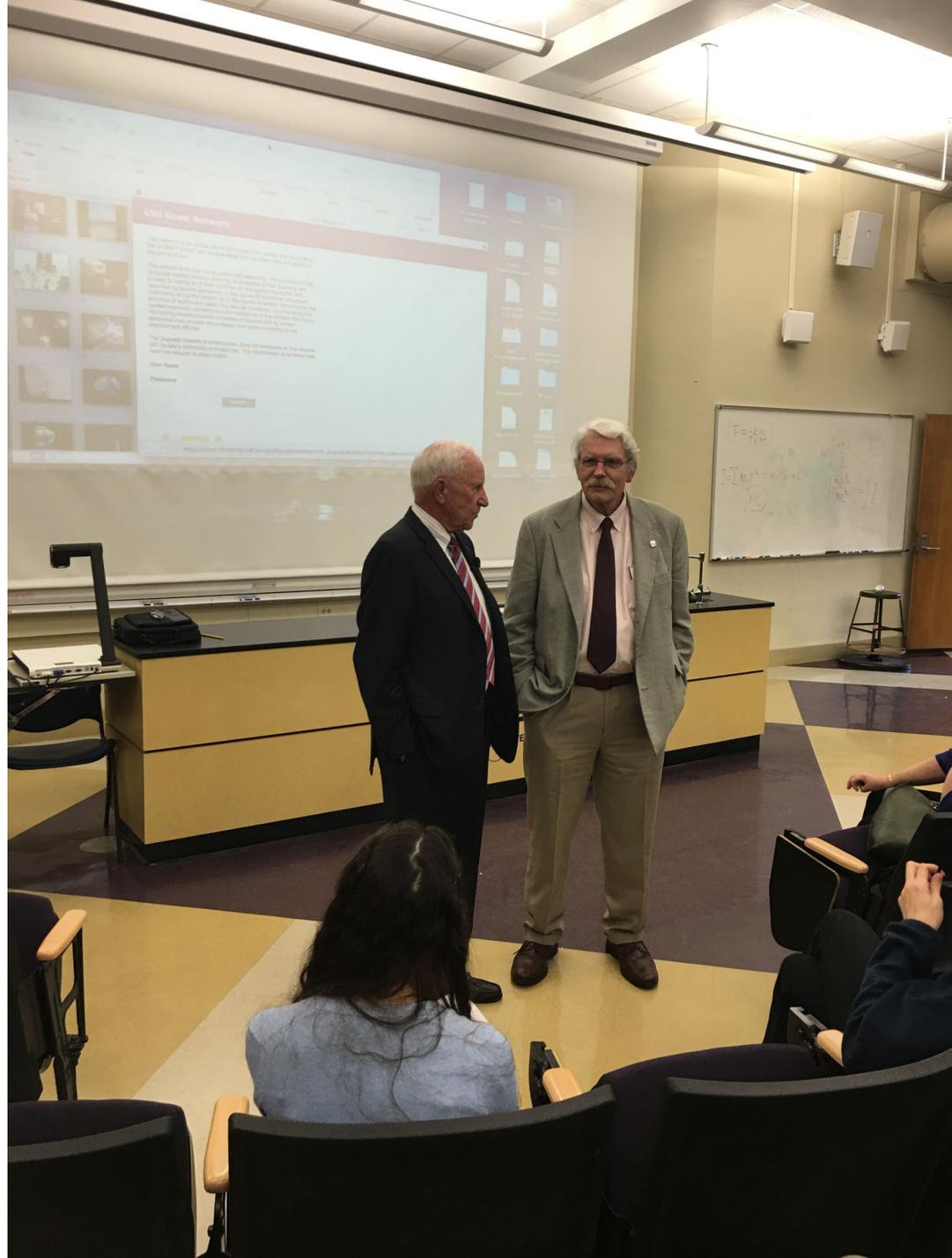


# Launching Louisiana Community College Students into STEM (LLCCSS)



T. Gregory Guzik, Louisiana State University  
Professor, Department of Physics and Astronomy  
Director, Louisiana Space Grant Consortium  
Principal Investigator, LLCCSS Project









Sign In

Home Tools LASPACE Fall 2017

### LASPACE Fall 2017 Council Meeting Agenda

Friday, November 17, 2017  
100 Student Union - Capitol Chamber Room  
9:00 Check in

9:00-9:05	Minutes from the previous meeting, unless the President	Gregory Johnson	LASPACE (LSP)
9:05-9:10	Official Announcement (OIA) - Training Report	Gregory Johnson	LSP
9:10-9:15	Official Announcement (OIA) - Office for LASPACE & LASPACE (LSP)	Gregory Johnson	LASPACE (LSP)
9:15-9:20	President's Report (PR) - Departmental Performance Report	Gregory Johnson	LSP Board of Fellows
9:20-9:25	Official Announcement (OIA) - Departmental Performance Report	Gregory Johnson	LSP (LSP)
9:25-9:30	Official Announcement (OIA) - Departmental Performance Report	Gregory Johnson	LSP (LSP)

10:00-10:20 AM NO INFORMATION DISPLAY

10:20-10:25	Project Address: "Can we change projects?"	Adam Brown	LSP
10:25-10:30	Project Address: "Can we change projects?"	Adam Brown, Grant Thibault	LSP
10:30-10:35	Project Address: "Can we change projects?"	Adam Brown, Grant Thibault	LSP
10:35-10:40	Project Address: "Can we change projects?"	Adam Brown, Grant Thibault	LSP
10:40-10:45	Project Address: "Can we change projects?"	Adam Brown, Grant Thibault	LSP
10:45-10:50	Project Address: "Can we change projects?"	Adam Brown, Grant Thibault	LSP

10:45-1:45 PM LUNCH BREAK (Jawahara Room)

10:45-11:00	Minutes of Board Meeting - Meeting Date: 10/10/17	James Morrison	LaTech
11:00-11:15	Minutes of Board Meeting - Meeting Date: 10/10/17	James Morrison	LaTech
11:15-11:30	Minutes of Board Meeting - Meeting Date: 10/10/17	James Morrison	LaTech
11:30-11:45	Minutes of Board Meeting - Meeting Date: 10/10/17	James Morrison	LaTech
11:45-12:00	Minutes of Board Meeting - Meeting Date: 10/10/17	James Morrison	LaTech
12:00-12:15	Minutes of Board Meeting - Meeting Date: 10/10/17	James Morrison	LaTech
12:15-12:30	Minutes of Board Meeting - Meeting Date: 10/10/17	James Morrison	LaTech
12:30-12:45	Minutes of Board Meeting - Meeting Date: 10/10/17	James Morrison	LaTech
12:45-1:00	Minutes of Board Meeting - Meeting Date: 10/10/17	James Morrison	LaTech
1:00-1:15	Minutes of Board Meeting - Meeting Date: 10/10/17	James Morrison	LaTech
1:15-1:30	Minutes of Board Meeting - Meeting Date: 10/10/17	James Morrison	LaTech
1:30-1:45	Minutes of Board Meeting - Meeting Date: 10/10/17	James Morrison	LaTech

Type here to search















Thanks to the National Space Grant Foundation

John Walker  
Jill Benson  
Kerry Clark

WILL ALSTON  
Faculty





BenQ

You are viewing T Gregory Guzik's screen

View Options

View

# MegaSat Provides a Payload "Core"



LAACES MegaSat payload stack

MegaSat is a custom board developed at Louisiana State University to provide training in surface mount components. The MegaSat interfaces with an Arduino Mega and includes two temperature sensors, one humidity sensor, one pressure sensor, a 3-axis accelerometer, a 3-axis gyroscope, and a real-time clock with backup battery.

The students assemble the MegaSat in the second half of the year and use it as the core of their payload.

Payload controller is the Arduino Mega  
The Adafruit Ultimate GPS Logger shield provides GPS data throughout the flight and enables recording data on a SD card  
The prototype area on the Adafruit GPS shield or a separate proto-shield board can be used to interface with other sensors

3/11/2021a

HASP 2021 Only - Summary



Remove Pin

T Gregory Guzik

Unmute

Start Video

116 Participants

Chat

Share Screen

Record

Reactions

Leave

DELL



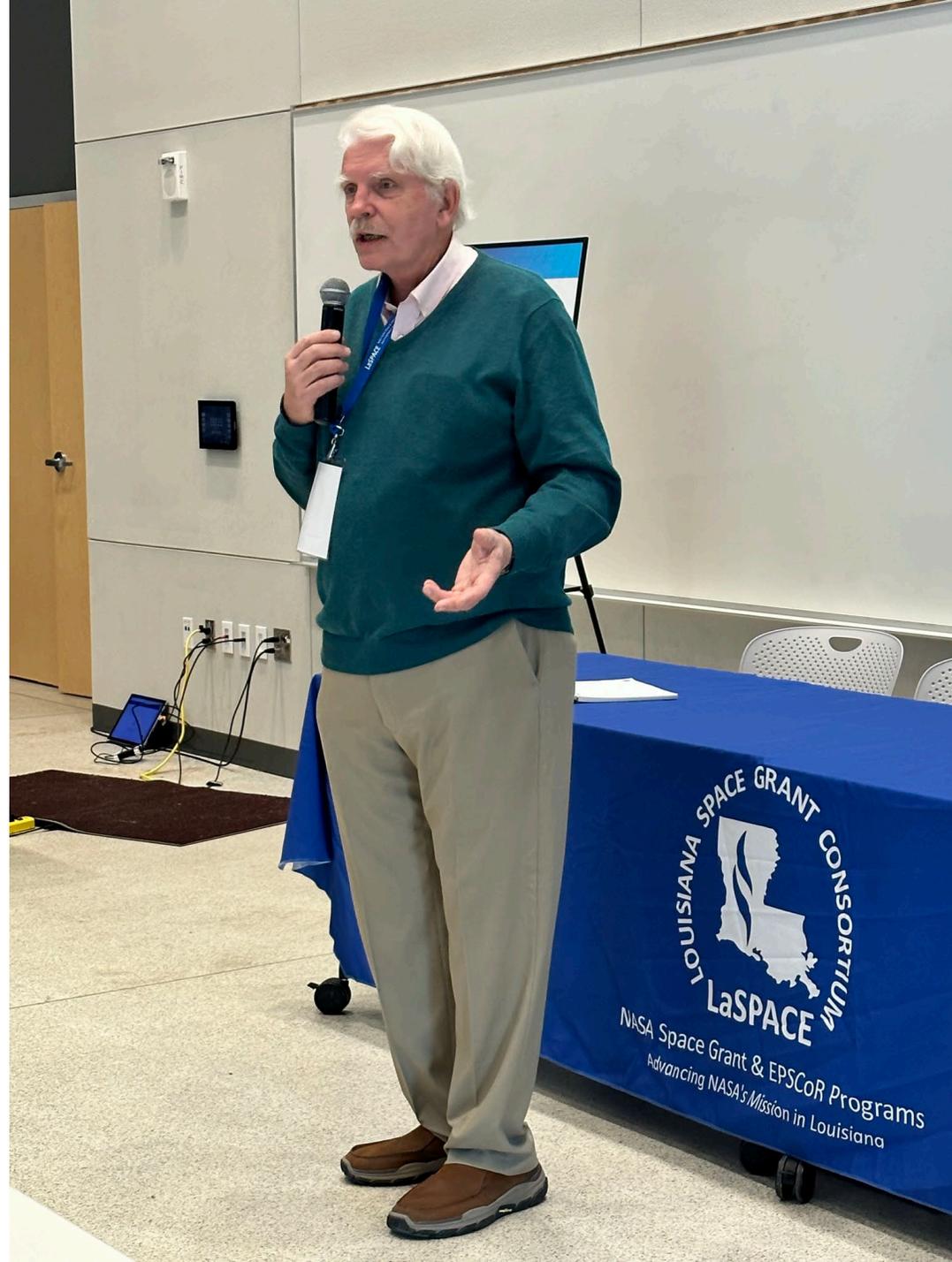


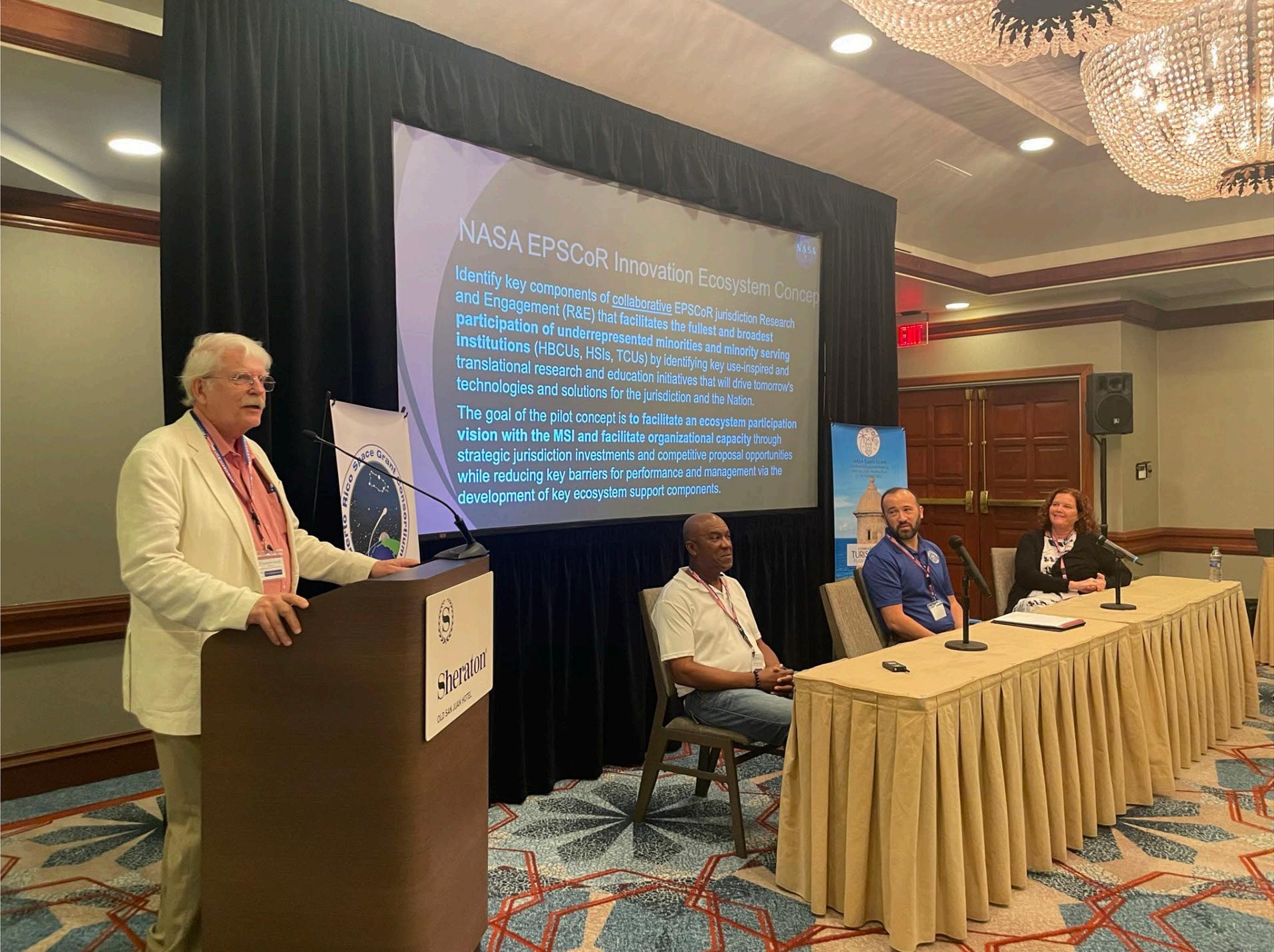












NASA EPSCoR Innovation Ecosystem Concepts

Identify key components of collaborative EPSCoR jurisdiction Research and Engagement (R&E) that facilitates the fullest and broadest participation of underrepresented minorities and minority serving institutions (HBCUs, HSIs, TCUs) by identifying key use-inspired and translational research and education initiatives that will drive tomorrow's technologies and solutions for the jurisdiction and the Nation.

The goal of the pilot concept is to facilitate an ecosystem participation vision with the MSI and facilitate organizational capacity through strategic jurisdiction investments and competitive proposal opportunities while reducing key barriers for performance and management via the development of key ecosystem support components.



Sheraton  
D.L. SAN JUAN HOTEL



FIND  
YOURSELF  
HERE

LSU College of Science  
YOUR  
QUESTION  
NOT

SCIENCE  
CAN TAKE  
YOU  
PLACES

National Aeronautics and Space Administration  
Outstanding Public Leadership Medal  
Gregory Guad



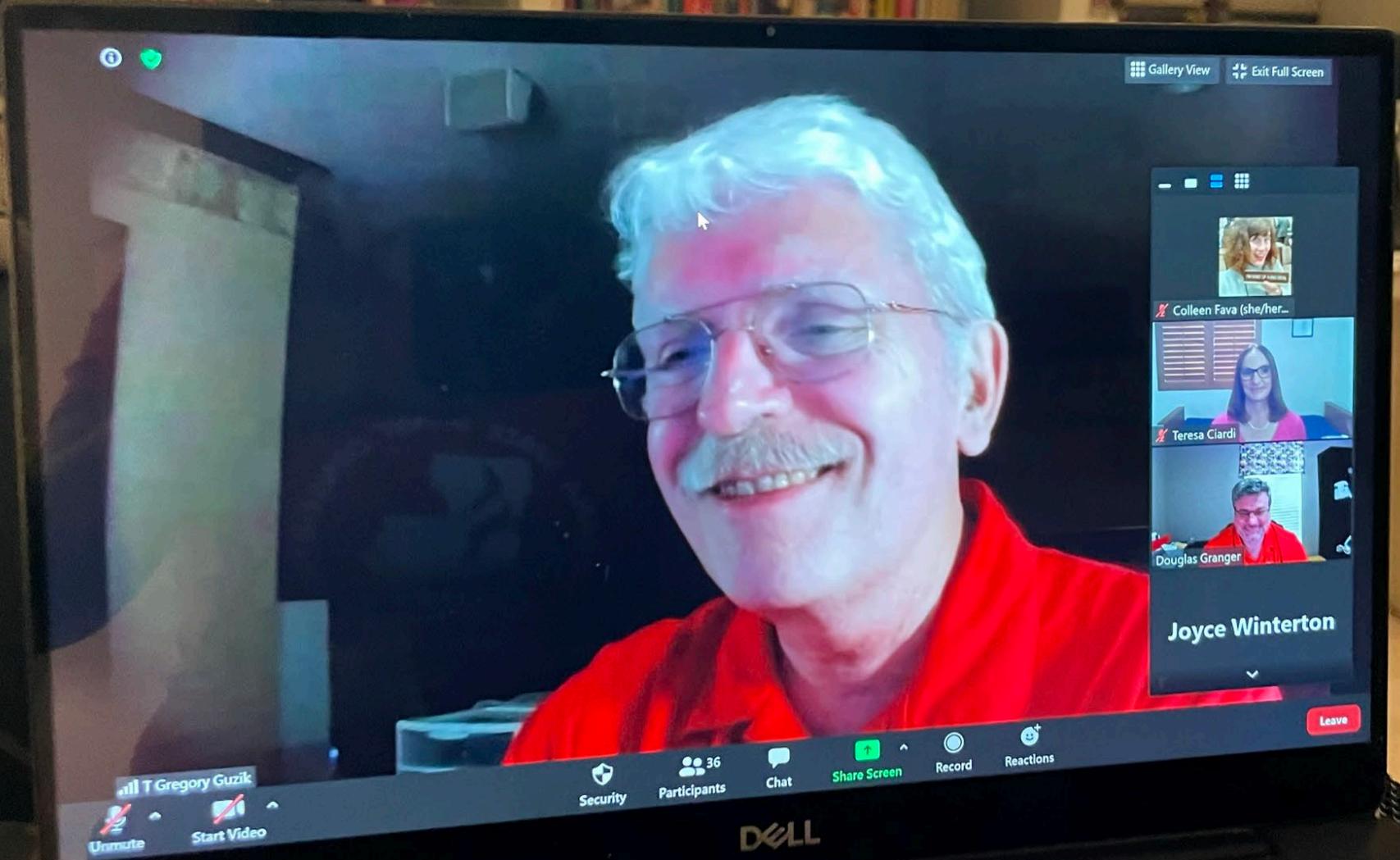
National Aeronautics and Space Administration  
presents the  
Outstanding Public Leadership Medal  
to  
Gregory Guzik

In recognition for many years of exceptional dedication and public service inspiring and leading the next generation of leaders in science, engineering and technology.

Signed and sealed at Washington, DC  
this twenty fifth day of September  
Two thousand fourteen

Dan Brinkman  
Director





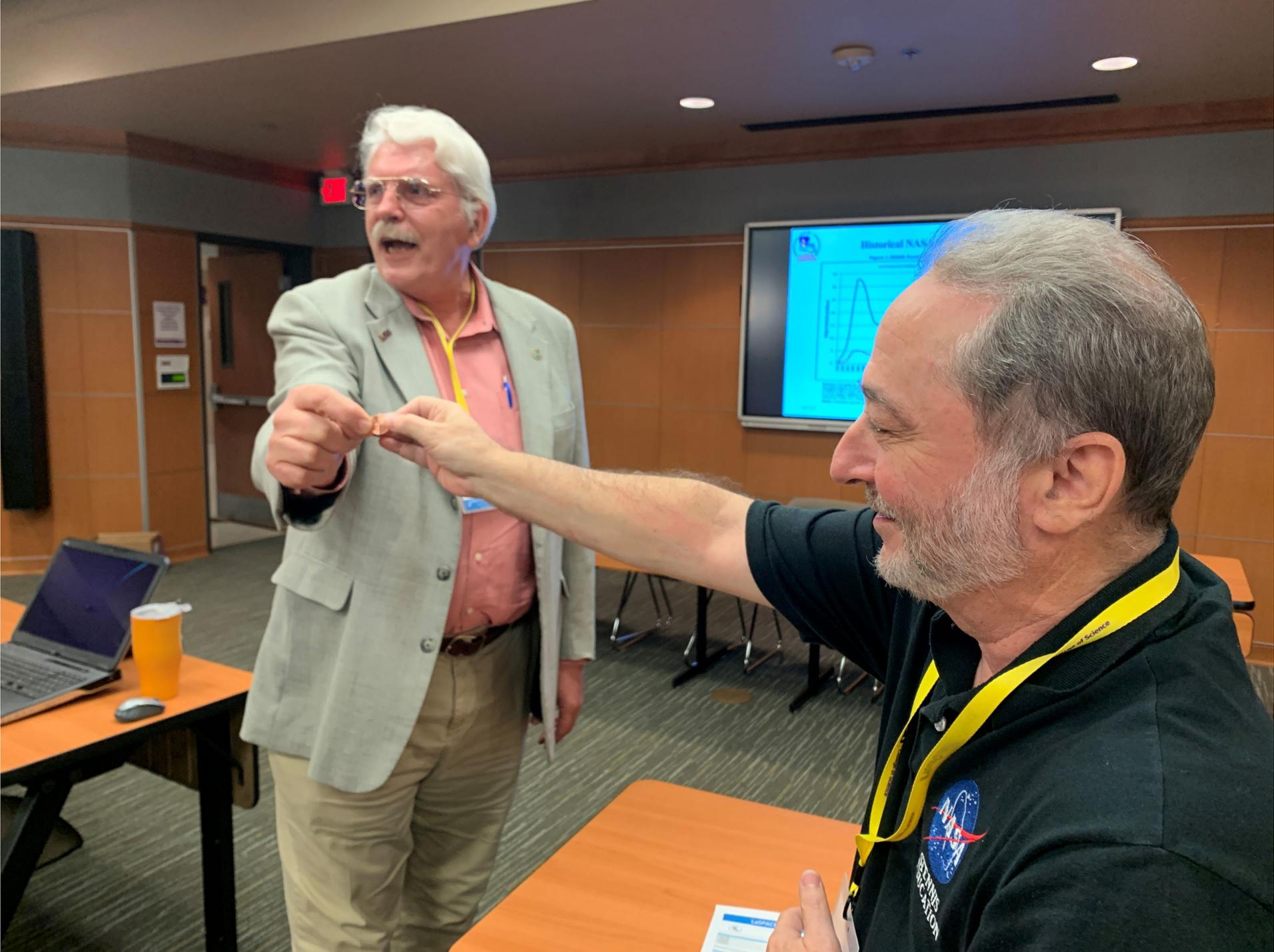
DELL

Bill T Gregory Guzik  
Unmute Start Video

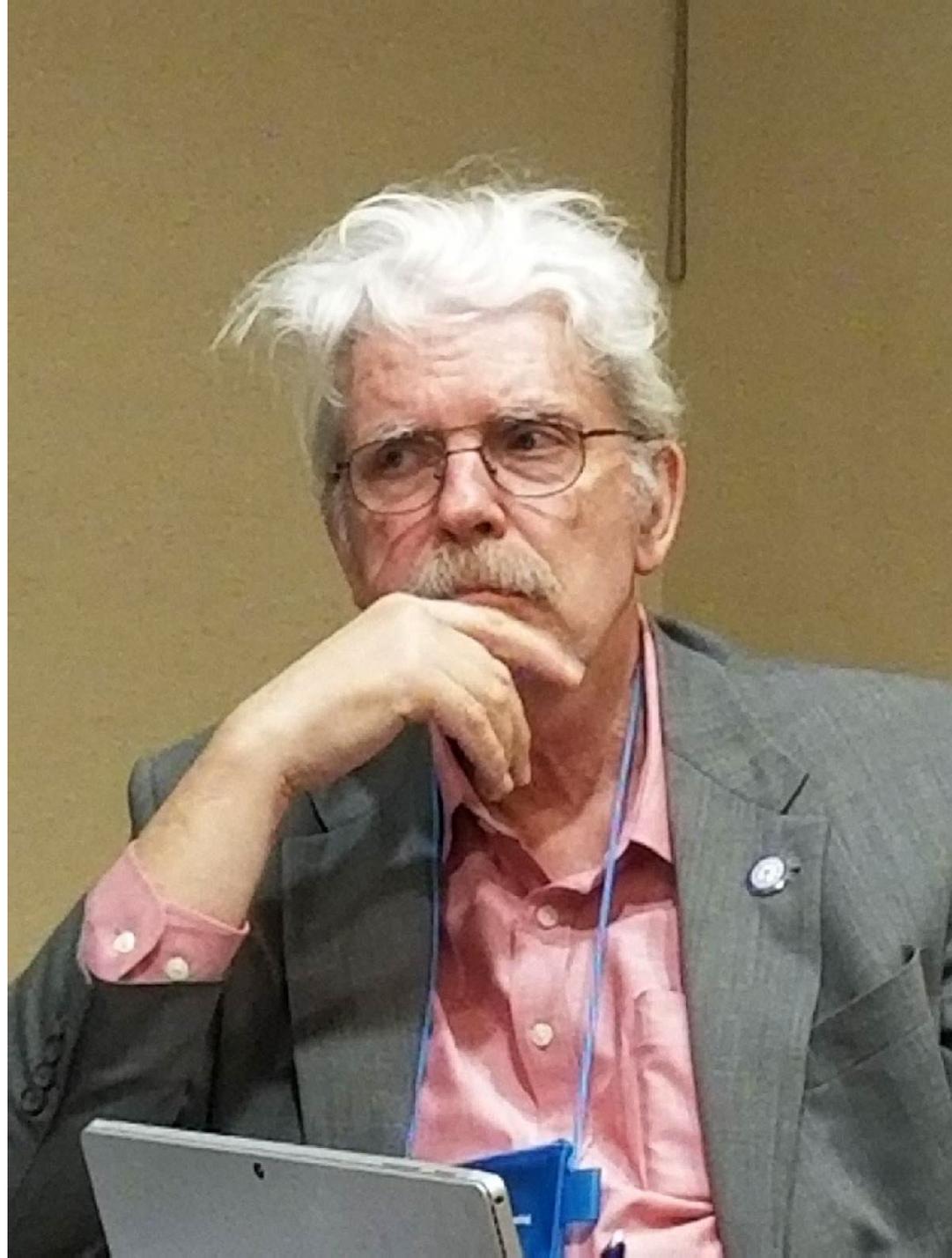
Security Participants 36 Chat Share Screen Record Reactions

Joyce Winterton

Leave















0552

05

### A Compact, Low-Cost Balloon Flight Attitude Orientation System

Jesse Garriz, Jesse Frank, Harrison Gietz, Sabrina Huezco, Douglas Granger, T. Gregory Guzik, and Aaron Ryan  
Department of Physics and Astronomy, Louisiana State University, Baton Rouge, Louisiana



#### Abstract

On flight, such as during a total solar eclipse, must consider factors such as the position of the Sun for the duration of the flight, the angular sensitivity of instrument solar detectors, and potentially large rotational and pendular fluctuations in the orientation of the payload. We developed an orientation system called COMPASS (Calculating Orientation and Measuring Pointing Angle for Scientific Systems) for flight on the High Altitude Student Platform (HASP). The goal of COMPASS is to determine the orientation of the payload using an accelerometer and magnetometer system. The second system is a camera array to capture the image of the sun and determine the orientation of the payload from the observed sun position. The performance of these camera system will be used to ascertain whether the camera are a viable method for determining orientation. This poster details camera system performance during the HASP 2021 payload testing and on its potential use for a solar eclipse.

#### Background

When the Earth's vector on the ground is compared with a magnetic field vector, the angle between the two vectors is the angle between the pointing vector and the Earth's gravity as a function of the Sun at any given time.



#### System Design

The system consists of a power, control, environmental, and camera system. The camera system is the main payload. The camera system is mounted on top of the main payload.

#### Flight Performance

- COMPASS flew on HASP on September 14, 2021 and took measurements of magnetic field and acceleration from the ground up to 30km while taking pictures of the Sun correlated with these measurements.
- Launch: 14:03 UTC
- Flight duration: 15:10:00 UTC

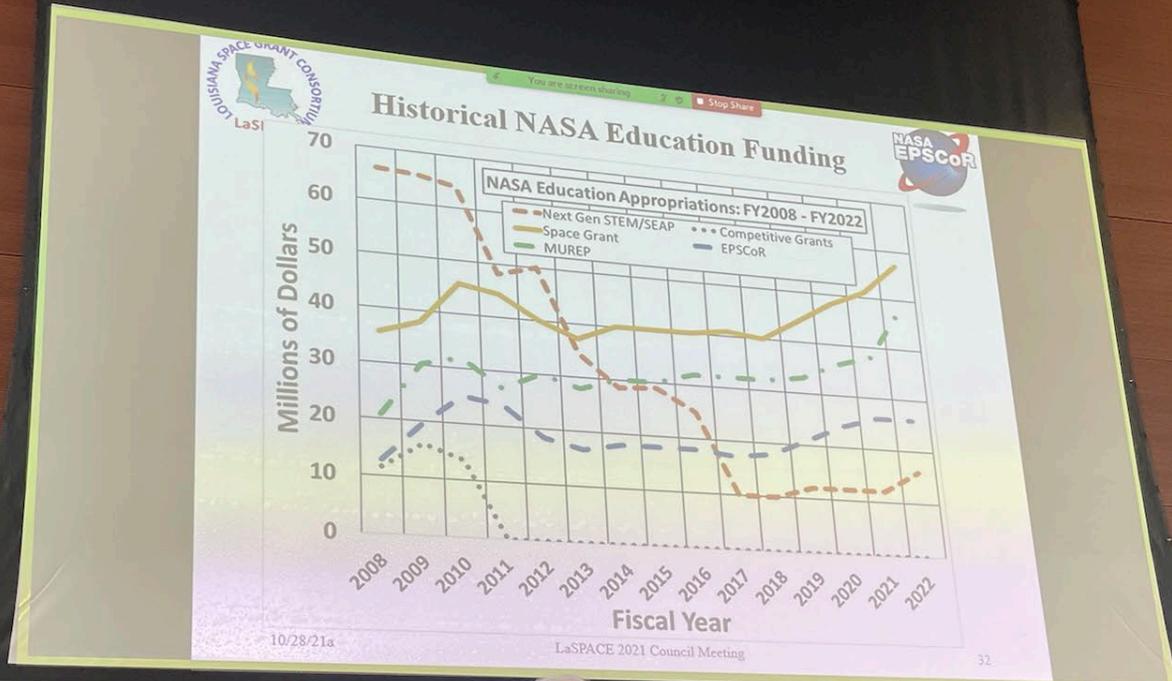


#### Analysis Results

Figures 13 and 14 show the results of the azimuth calculations from the orientation systems and how they compare between the boom payload and main payload.



I will be at my poster from 14:00 to 15:00 hrs











2025 HONOREES



**Isiah M. Warner**  
Boyd Professor Emeritus  
Chemistry



**John P. Wefel**  
Professor Emeritus  
Physics & Astronomy



**Erich M. Sturgis**  
Alumnus, Executive Committee and  
LSU Foundation National Board

**LSU** | College of Science

PROUDLY INDUCTS

*John P. Wefel*

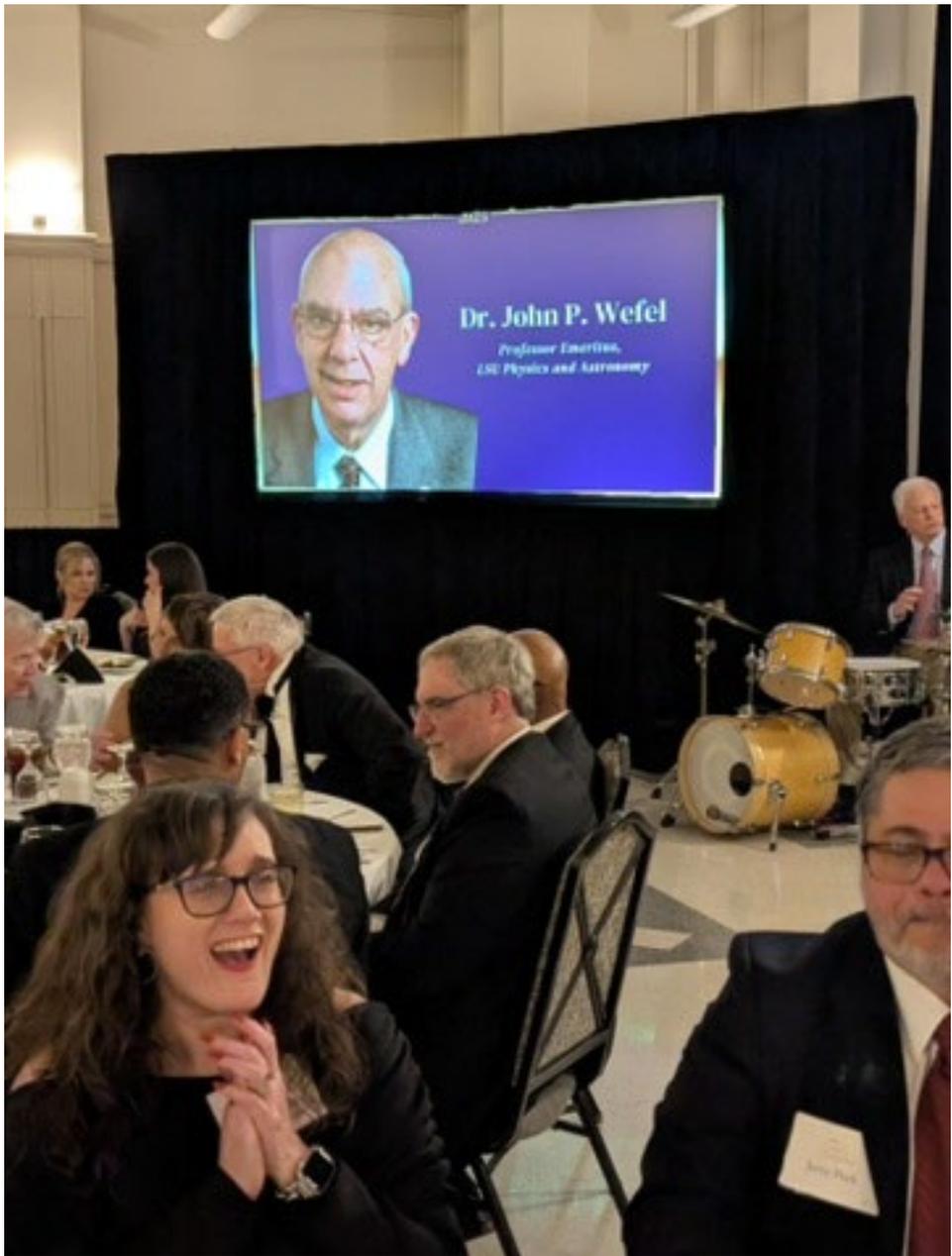
INTO THE

**HALL OF DISTINCTION**

IN RECOGNITION OF A LIFETIME OF SERVICE AND ACHIEVEMENTS IN SCIENCE  
AND FOR DEDICATION TO LSU

MARCH 28, 2025







EXIT

*April*  
28,  
1944



*March*  
30,  
2025

*John Paul Wefel*

*April 28, 1944 — March 30, 2025*

OBITUARY

# *T. Gregory Guzik*

AUGUST 21, 1952 - AUGUST 19, 2025



IN THE CARE OF

Rabenhorst Funeral Home & Crematory