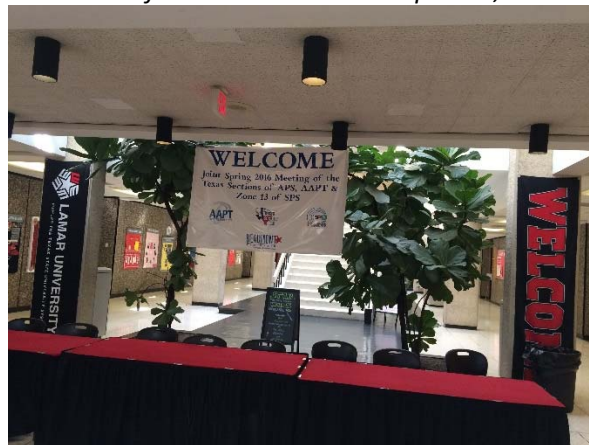


*Joint Spring 2016 Meeting of the Texas Sections of APS, AAPT, and Zone 13 of SPS – March 31<sup>st</sup> – April 2<sup>nd</sup>, 2016*

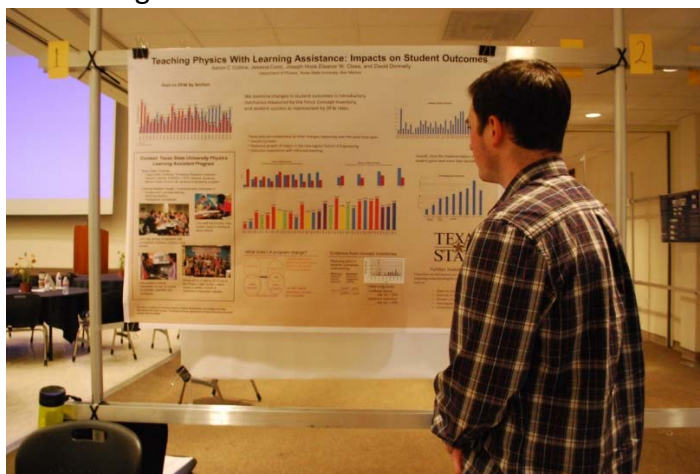
Between March 31 and April 2<sup>nd</sup>, Lamar University organized the Joint Spring 2016 Meeting of the Texas Sections of APS, AAPT, and Zone 13 of SPS (TSS16).



The conference was hosted in the Setzer Student Center of Lamar University and offered 10 plenary talks, 6 APS breakout sessions, one AAPT break out session, one SPS session, and two poster sessions with a total of 34 poster presentations. Our conference started in the evening of March 31<sup>st</sup> with the 'SPS Get Together!' event and the Executive Board meetings of the Texas Sections of APS and AAPT.

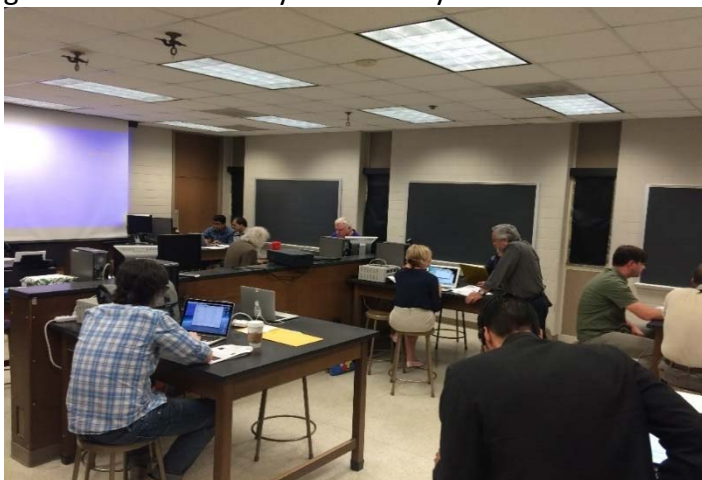


*Plenary session hosted in the Ballroom of the Setzer Student Center*



*Poster session*

The Archer-Physics building hosted 9 AAPT workshops split in three parallel sessions coordinated by Dr. Tom O’Kuma from Lee College with nearly 60 participants (teachers, students, faculty and staff) from various schools in Texas. There were approximately 200 papers submitted to our conference with 185 registered participants according to the American Physical Society headcount.



*An AAPT workshop in a laboratory of the Physics Department, hosted by Dr. Tom O’Kuma from Lee College.*

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Our conference also hosted a Career Pathways in Physics workshop led by Dr. Toni Sauncy from Texas Lutheran University and the former Director of SPS, and welcomed a special guest from the Workforce Solutions of Southeast Texas, Ms. Lauren van Gerven.

The plenary speakers were from various national labs (NASA Goddard Space Flight Center, NIST, Oak Ridge National Lab), several schools from Texas (Rice University, UT Austin, Texas A&M, Baylor University) and other states (University of Central Florida, Kansas State University). A list of our invited guests and the title of their talks is given below. Our 185 participants to the conference came from states as far as New Jersey or from nearby states such as Louisiana and Mississippi, and from almost all major schools in Texas. In addition we had 35 honors student volunteers from Lamar. Many Lamar faculty, students, and staff members visited the site of the conference and attended some of the plenary talks. We had talks and posters contributions from various STEM programs at Lamar, including from Chemistry, Biology, Mathematics, Electrical and Mechanical Engineering.



*Dr. Matthew Greenhouse (left), invited speaker from the NASA Goddard Space Flight Center and Dr. C. Bahrim (Lamar U).*



*Dr. Richard Kyung (right), Director of the Choice Research Group Heekyoung Woo, New Jersey and Dr. C. Bahrim (Lamar U).*

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Dr. Dean Zollman, University Distinguished Professor and Distinguished University Teaching Scholar at Kansas State University was our AAPT keynote speaker at the special lunch offered on April 1<sup>st</sup>, in the Ballroom of the Setzer Student Center. His talk was about *"Engaging Students in Quantum Physics - Research and Practice"*



*Dr. Dean Zollman from Kansas State University was our AAPT keynote speaker.*

The banquet was organized in the evening of April 1<sup>st</sup> and was hosted at the reception center of Lamar:



We had several special guests from Lamar's higher administration including President Kenneth Evans, Dean Joe Nordgren of the College of Arts & Sciences, Dean Kevin Dodson of the Reaud Honors College, Dr. Kumer Das, the Director of the Office of Undergraduate Research, Mr. Brian Sattler, the Director of Public Relations, and several Lamar faculty, staff, and students, who joined about 123 conference guests



*President Kenneth Evans of Lamar University (Dean Dodson of the Reaud Honors College is at his right hand side).*

The APS keynote speaker at the banquet was Dr. Tom Killian, Chair and Professor of Physics and Astronomy at Rice University. His talk was about: *"From Ultracold Plasmas to White Dwarf Stars"*



*Dr. Tom Killian from Rice University was the APS keynote speaker.*

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**The conference had two very successful satellite meetings:**

- On March 30<sup>th</sup>, the Office of Undergraduate Research hosted a campus visit of Dr. Steve Bradshaw, William V. Vietti Junior Chair of Space Physics at Rice University who also gave a talk in front of Lamar students and faculty about the “Solar Flares and their Impact in the Solar System”. During his tour, Dr. Bradshaw visited the Department of Earth and Space Sciences and the Department of Physics.
- On March 31, Dr. Matthew Greenhouse, Senior Scientist for the instrumentation package at the NASA Goddard Space Flight Center visited the College of Engineering and gave a talk to students and faculty about the engineering aspects in the development and usage of the James Webb Telescope project, the most expensive scientific project in the history of the United States. This special seminar brought together more than 80 students and faculty. The discussion expanded on the future of NASA, the status on the James Webb Space Telescope project, which will eventually replace the Hubble telescope in a couple of years, and about various aspects related to a better science and engineering training for our Lamar students willing to join NASA.
- Dr. Dean Zollman’s visit to the College of Education and Human Development was cancelled because on his flight cancellation due to weather conditions in Dallas.

**Impressions about the physics conference are included in the on-line article published by the Director of Public Relations at Lamar University, Mr. Brian Sattler on the Lamar website at <https://www.lamar.edu/news-and-events/news/2016/03/students,-academics-and-professionals-benefit-from-lus-first-physics-conference.html>. In particular the article includes testimonials from one of our AAPT invited speakers, Dr. Talat Rahman and one of our APS invited speakers, Dr. Steve Bradshaw.**

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**List of invited speakers:**

**APS track:**

**Keynote speaker:** Dr. Thomas Killian - Chair and Professor of Physics and Astronomy at Rice University

Talk: *"From Ultracold Plasmas to White Dwarf Stars"*

**Plenary speakers:**

**Dr. Talat Shahnaz Rahman** - UCF Pegasus Professor at University of Central Florida.

Talk: *"Tailoring Properties of Single Layer Transition Metal Dichalcogenides: Looking Beyond Graphene"*

**Dr. Carl Gagliardi** - Professor of Physics at Texas A&M College Station and member of the STAR Collaboration at Brookhaven National Laboratory.

Talk: *"What makes the proton spin?"*

**Dr. Gillian Nave** - Researcher at National Institute of Standards and Technology (NIST), Maryland.

Talk: *"Atomic data for the diagnosis of astrophysical plasmas"*

**Dr. Matthew A. Greenhouse** - James Webb Space Telescope Scientist for the instrument package, NASA Goddard Space Flight Center

Talk: *"The James Webb Space Telescope Mission"*

**Dr. Paul Snijders** - Research Staff at Oak Ridge National Laboratory, and Department of Physics and Astronomy, The University of Tennessee, Knoxville.

Talk: *"Surfaces - condensed matter physics in accessible systems"*

**Dr. Stephen Bradshaw** - William V. Vietti Junior Chair of Space Physics at Rice University.

Talk: *"Explosive phenomena in the solar atmosphere"*

**AAPT track:**

**Keynote speaker:** Dr. Dean Zollman - University Distinguished Professor and Distinguished University Teaching Scholar at Kansas State University

Talk: *"Engaging Students in Quantum Physics - Research and Practice"*

**Plenary speakers:**

**Dr. Talat Shahnaz Rahman** - UCF Pegasus Professor at University of Central Florida.

Talk: Education: *"A glimpse at the workings of PhysTEC Comprehensive Site and APS Bridge Program Site at UCF"*

**Dr. Jill A. Marshall** - Associate Professor at the University of Texas at Austin, Associate Co-Director of the UTeach secondary STEM teacher certification program.

Talk: *"Replicating the UTeach Model for 10 Years: Where We Are and What We Have Learned."*

**Lamar University, and in particular, the Department of Physics are grateful for having the privilege to be the host of such a significant event. We thank to the Executive Board of the Texas Section of AAPT for graciously offering us this opportunity.**

Cristian Bahrim

Professor of Physics and the Chair of the Joint Spring 2016 Meeting of the Texas Sections of APS, AAPT, and Zone 13 of SPS