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Spring Meeting

The Joint Spring 2011 Meeting of the Texas Section APS, Texas Section of the AAPT & Zone 13 of SPS (TSAPS) will be held on March 3-5, 2011 in Nacogdoches. The meeting will be hosted by Stephen F. Austin University. Important deadlines are:

- Abstract Submission Deadline - February 4, 2011
- Early Registration Deadline – February 20, 2011

The meeting will feature general sessions on the Frontiers of Physics and Innovations in Physics Teaching. There will be sessions of APS, AAPT, and SPS contributed papers on a wide variety of topics.

SPECIAL EVENTS

- On Thursday evening March 3, 2011, registration and a welcoming reception will be held from 6:00-9:00 PM in the Kennedy Auditorium on the campus of Stephen F. Austin State University.

- The Friday morning plenary session will include a presentation by Dr. G. Fritz Benedict titled "Recent Adventures with the Hubble Space Telescope." His talk will be followed by Dr. David Lambert who is the director of the McDonald Observatory.
- After lunch on Friday, we will have a special plenary session on "Physics Demonstrations." We invite all meeting attendees to bring their favorite physics demonstration to share with everyone. This session will be led by Dr. Walter Trikosko who will present several demonstrations that he and the SFA Physics Department have developed.
- The Friday evening banquet presentation is titled "Low Temperature Physics Extravaganza" by Dr. Glenn Agnolet. "Using simple but exciting demonstrations, we will explore how everyday materials change when cooled to liquid nitrogen temperatures."
- Meeting participants will be able to take a tour of the SFA Observatory or watch a Planetarium Show after the banquet on Friday evening.
- The Saturday morning session will begin with a plenary presentation titled "Radio Tracking Transmitters" by Philip Blackburn - manufacturer of the world's smallest radio transmitters. These transmitters are primarily used for tracking snakes, birds, and other wildlife.
- A program of hands-on workshops for physics teachers will be presented during the meeting. Exhibitors will display their products/programs in the break area.

The meeting website is:

<http://astro.sfasu.edu/springmeeting/>

Abstracts are to be submitted through the TSAPS website:

<http://abstracts.aps.org/Meeting.cfm?thisMeetingID=TSS11>

Spring 2010 TSAAPT/TSAPS/SPS Meeting in Austin

(Adapted from summary by Thomas L. Okuma, TSAAPT Section Representative). The Texas Section of AAPT, the Texas Section of the American Physical Society, and Zone 13 of the Society of Physics Students held a joint meeting March 18 - 20, 2010 at the University of Texas at Austin and Austin Community College. Those most responsible for the meeting arrangements were Jill Marshall and Austin Gleeson of UT with the very capable assistance of Olga Vorlou and Becky Drake, Paul Williams of ACC, Tom O'Kuma of Lee College, and C. A. Quarles of Texas Christian University. There was a total registration of over 200 persons, including over 100 registered as students. The meeting website is:

<http://www.ph.utexas.edu/TSAAPTSpring2010/>



The program of the meeting contained 12 paper sessions, 3 plenary sessions, 1 poster session, and 7 workshops, making a total of 112 presentations. The breakdown of these papers was as follows: contributed and invited papers - 20 AAPT, 8 SPS, 14 posters, and 61 APS. The 6 workshops had a total attendance of 59 with some attending more than one workshop. Two special

workshops for new teachers were presented as part of our AAPT Mini-Grant with 38 participating.

During the TS AAPT Friday plenary session, Sacha Kopp of the University of Texas at Austin discussed "Hands-On Science: An Inquiry-Based Integrated Science Content Course for Pre-service Elementary Teachers", Michael Marder of UT-Austin then discussed "Fluid mechanics of mathematics testing in Texas", Willy Fischler of UT-Austin discussed "Challenges in Theoretical Physics", and Charlie Cooke of UT-Austin presented "Energy Security: From Deal Killers to Game Changers". The Saturday plenary session had Dewey Dykstra of Boise State University addressing "Seeing the Growth of Physical Theory in Students' Minds" and Xiaoquin Li of UT-Austin presented "Research and Education Activities under NSF-IGERT program at the University of Texas - Austin".

David Gavenda, was presented the Distinguished Service Award at the banquet on Friday evening, followed by a stimulating presentation by Jay Banner of the University of Texas at Austin discussing "Texas Climate Change: Past, Present and Future".

Other meeting activities included a joint AAPT-APS luncheon and business meeting with over 200 persons attending and special activities for SPS chapters including a workshop on Scientific Ethics presented by Karen Williams of East Central University.

David Gavenda receiving the Distinguished Service Award from Suresh Sharma at the Austin meeting, 19 March 2010.

Fall Meeting in San Antonio

(Adapted from minutes submitted by Lorenzo Brancaleon). The Department of Physics and Astronomy of the University of Texas at San Antonio hosted the 2010 Fall Meeting of the Texas Section of the APS/AAPT/Zones 13 SPS/

NSHP/NSBP. The meeting was held on November 21-23 and was co-hosted by the Department of Physics and Astronomy at Trinity University. Local organizers were Dr. Lorenzo Brancaleon (UTSA) and Dr. David Hough (Trinity University). Final registration included a total of 376 conference attendees. The Friday luncheon was attended by 238 guests and the Friday evening banquet by 159. The banquet speaker was, Dr. Pedro Montano of the Office of Science of the Department of Energy.

The meeting was opened by Dr. John Fredrick, Provost of UTSA. The invited session on Friday morning was given by R. Elber (UT Austin) with the talk Milestoning: A rigorous coarse graining method for simulating properties of biological molecules and I. Sanchez (UT Austin) with the talk Towards a Model of Cold Denaturation of Proteins. The invited session on Friday afternoon was given by X. Peralta (UT San Antonio) with the talk Standing-wave plasmon resonances in THz and C. Ordonez (U. of Houston) with the talk Near-horizon expansion (conformal) approach to the calculation of Black Hole entropy in 't Hooft's brick-wall model. The Saturday morning invited session was given by M. Samara (Southwest Research Institute) with the talk Ground-based Optical Observations of Geophysical Phenomena: Aurora Borealis and Meteors and G. MacAlpine (Trinity University). Particular thanks go from the organizing committee to Dr. MacAlpine since he substituted on an extremely short notice for

another invited speaker who was unable to attend the conference.

There were 15 concurrent APS paper sessions, 2 SPS/AAPT sessions and one poster session. There was a total of 160 oral presentations and 76 poster presentations. Including the plenary talks, there were a total of 244 presentations which is the highest over the last five years.

APS officers held executive meetings on Thursday evening at one of the conference rooms within the Department of Physics and Astronomy. The APS officers had their business meeting during Friday lunch. Friday Lunch included the presentation of the Texas Section's Undergraduate Hyer Award to Thomas Markovich and his mentor Dr. Donald J. Kouri of the University of Houston. They received the award for their contribution to the development of novel extensions and applications of Super-Symmetric Quantum Mechanics towards solving realistic multi-particle and multi-dimensional systems. The 2011 graduate Hyer award went to Antonois Samiotakis and his mentor Dr. Margaret S. Cheung (Univ of Houston) for their studies of the dynamics of biological macromolecules under crowded cell-like conditions. The Friday banquet included presentations of the TSAPS Distinguished Service award to Stephen D. Baker, Rice University, C.A. Quarles, Texas Christian University and posthumously to James R. Crawford, Texas State University. Veanna Crawford, Jim's widow accepted the award.

The TSAAPT held their executive meeting on Thursday evening and their business meeting during the Friday lunch. The TSAAPT also hosted five workshops for high school and middle school teachers on Friday and Saturday. The workshops had a total of 51 attendees including 1 MS teacher, 25 HS teachers, 18 TYC students and 7 University students.

Stephen Baker (right) accepting Distinguished Service Awards from Chair Wilhelmus Geerts at the San Antonio meeting, 22 November 2010.



Become a TSAPS Member

Most of the TSAPS funds come from \$4 per member per year that we receive from the national APS. It costs nothing extra to become a member of TSAPS. If you know any APS members who are interested in promoting physics in and around Texas, please encourage them to join. One does not have to be a Texas resident to become a member, so residents of nearby states are particularly invited.

Supposedly, all TSAPS members will receive this newsletter. You might mention this to your colleagues or other APS members and encourage them to join TSAPS if they did not receive anything. You can check your membership in sections and forums at the APS website <http://www.aps.org/> (login required). Click on the tab labeled Membership.

C.A. Quarles accepting the Distinguished Service Awards from Chair Wilhelmus Geerts at the San Antonio meeting, 22 November 2010.



Physics Careers in Industry and Government

The Forum on Industrial and Applied Physics (FIAP) is organizing a workshop "Physics Careers in Industry and Government" on Sunday March 20 just before the start of the March meeting in Dallas. The workshop is meant for graduate and undergraduate students interested in physics career information, physicists facing a career transition or interested in successful career strategies, and faculty planning study programs for non-academic physics careers. The workshop registration fee is \$50.- for students and \$100. -- for regular members. More information on the workshop can be found at:

Spring Deadline for 2011 Robert S. Hyer Research award Nominations:

Robert S. Hyer was a faculty member at Southwestern University in Georgetown (approximately 30 minutes north of Austin). He lived around the turn of the 20th century and was interested in the work of Maxwell, Hertz, and

Roentgen. He set up a radio connection between Southwestern University and the county jail, going wireless at least a year before Marconi. Robert S Hyer was a remarkable scientist.

The Texas Section named a research award in his honor. Each year since 2007 the section has awarded the Robert S. Hyer Research Award to a student and his/her adviser for their research. The criteria are the quality and potential impact of the research. Although originally only one award was made, since 2008 we have judged graduate and undergraduate students in separate competitions. To be eligible the work needs to have been presented at a Texas section meeting during the last two years and both the student, as well as his/her mentor, need to be a member of TSAPS. This year's nomination deadline

is Saturday, May 14. The nominations are ranked by the Hyer award committee, i.e. Prof. Dr. Marjorie Corcoran of Rice University, Nobel Laureate Prof. Dr. David Lee of Texas A&M, and Prof. Dr. Ramon Lopez (chair) of UT-Arlington. More information on the nomination process (including an application form) can be found at:

<http://www.aps.org/units/tsaps/awards/hyer/index.cfm>

New TSAPS Logo

TSAPS has a new logo, used in this newsletter. The logo competition was announced in our Newsletter No. 1. The TSAPS logo competition committee, Michael Sadler, Wim Geerts and Carlos Bertulani, selected the artwork of Rick Navarro (Texas A&M-Commerce). Rick will be awarded \$250, which will be presented together with a certificate at the TSAPS spring meeting (Mar. 3-5, 2011, Nacogdoches).

Fall 2011 Meeting

The 2011 Fall Meeting of the Texas Section of the APS/AAPT/Zones 13 SPS/ NSHP/NSBP will be held on Texas A&M University-Commerce, October 6-8, 2011. The keynote speaker will be Prof. Ray Orbach, former Director of the Office of Science and Under Secretary for Science in the Department of Energy.

TSAPS Executive Committee

Chair: Wilhelmus Geerts
Texas State University - San Marcos

Chair-Elect: Mario Diaz
University of Texas, Brownsville

Vice Chair: Harry Swinney
University of Texas, Austin

Past Chair: Suresh Sharma
University of Texas, Arlington

Secretary/Treasurer: Charles Myles
Texas Tech University

Councillor: Heather Galloway
Texas State University - San Marcos

Member-at-Large: Lorenzo Brancoleon
University of Texas, San Antonio

Member-at-Large: Michael Sadler
Abilene Christian University

Member-at-Large: Carlos Bertulani
Texas A&M University-Commerce, Commerce

Member-at-Large: Sacha Kopp
University of Texas, Austin

See you in Nacogdoches,
Michael Sadler and Carlos Bertulani, editors.