

Joint Fall 2012 Meeting of the TSAPS, TSAAPT & Zone 13 SPS

Revised Schedule Outline

Note! The Epitome on the APS website lists some incorrect LOCATIONS for the various sessions!
This document REPLACES the schedule shown in that Epitome!! Last changes 10/25/12.

Thursday, October 25

All Thursday events are at the Baymont Inn Hotel.

5:30pm:

Meeting Registration Table Open. SPS Reception Set Up. Hotel Ballroom.

6:00pm – 9:00pm:

SPS Reception & Refreshments. Meeting Registration. Hotel Ballroom.

Texas Section APS Executive Committee Meeting. Hotel Conference Room

Texas Section AAPT Executive Committee Meeting. Hotel Breakfast Room.

8:30pm:

TSAPS & TSAAPT Executive Committees Joint Meeting in whichever room is largest.

Friday, October 26

Morning Events at the Holiday Inn Towers

8:00am – 5:00pm:

Meeting Registration in the common area outside the meeting rooms.

8:00am: Welcoming Remarks in the Petroleum Room.

Welcoming Remarks: Charley Myles will open the conference for about 2 minutes. Roger Lichti, Physics Chair, will then welcome people on behalf of the Department. He will call on Jeff Williams, Interim Dean of the College of Arts & Sciences, to add a few words of welcome.

8:15am:

A1. Plenary Session I in the Petroleum Room.

3 invited talks of 35 minutes each, starting at 8:15.

Invited Speakers

1. **Nural Akchurin:** “Higgs Boson Search at CERN”
2. **James Chelikowski:** “Practical Quantum Mechanics for Materials”
3. **Scott Pendleton:** “Transient Plasma Physics: Nanosecond Pulsed Power”

10:00am:

Refreshments & Coffee in the common area outside the meeting rooms.

10:30am: Parallel sessions as follows

B1. Industrial & Applied Physics in University room.

1 invited talk of 35 minutes + 8 contributed talks of 12 minutes each.

Invited Speaker

Igor Alvarado: “The Important Role of Physics in Industry and Economic Development”

B2: SPS and Undergraduate Research in Heritage room.

9 contributed talks of 12 minutes each.

B3: Biological and Chemical Physics in Cotton room.

9 contributed talks of 12 minutes each..

B4: High Energy, Nuclear, and Accelerator Physics I: in Tumbleweed room.

Presentation by the 2012 Undergraduate Robert S. Hyer Research Award Recipient & Contributed Papers
1 invited talk of 30 minutes + 5 contributed talks of 12 minutes each.

2012 Undergraduate Robert S. Hyer Recipient

Landon Bannister: “Searching For Dark Matter Portals Using B Meson Decays to Four Leptons”

B5: Computational and Fundamental Physics in Windmill room.

6 contributed talks of 12 minutes each.

B8: Condensed Matter and Materials Physics I in Petroleum room.

9 contributed talks of 12 minutes each. Session should end about 12:12pm.

Friday, October 26

Morning Events on the Texas Tech University Campus

10:30am: Parallel Workshops in the Science Building

B6: AAPT Workshop I in Science Room 119.

B7: AAPT Workshop II in Science Room 120.

Afternoon Events at the Holiday Inn Towers

12:30pm:

C1. Lunch, TSAPS & TSAAPT Business Meetings

Charley Myles will make some announcements. Then, he will turn the podium over to the TSAPS & TSAAPT.

1. **Harry Swinney**, TSAPS Chair, will preside at the TSAPS business meeting. 15 – 20 min. max.

2. **Joe Musser**, TSAAPT President, will preside at the TSAAPT business meeting. 15 - 20 min. max.

2:00pm: Parallel sessions as follows

D1. Plenary Session II Biological & Medical Physics in the Petroleum Room

2 invited talks of 30 minutes each, starting at 2:00pm.

Invited Speakers

1. **Michael Deem**: “Physical Theory of the Immune System”

2. **Roland Allen**: “Theory and Experiment in Biomedical Science”

3:00pm:

Refreshments & Coffee in the common area outside the meeting rooms.

3:30pm: Parallel sessions as follows

E1. Invited and Contributed Papers in Biological and Medical Physics in the Petroleum Room

2 invited talks of 35 minutes each, plus 5 contributed talks of 12 minutes each.

Invited Speakers

1. **Jason Slinker**: “DNA in Nanoscale Electronics”

2. **Kelvin Cheng**: “Protein Unfolding and Alzheimer’s”

E4: Atomic, Molecular and Optical Physics I in the Heritage room.

10 contributed talks of 12 minutes each.

E5: Nanoscience in the Cotton room.

8 contributed talks of 12 minutes each.

E6: Outreach, Education, and AAPT in the Windmill room.

5 contributed talks of 12 minutes each.

E7: Invited & Contributed Papers in Condensed Matter/Materials Physics in the University room.

1 invited talk of 35 minutes, plus 8 contributed talks of 12 minutes each.

E8: High Energy, Nuclear, and Accelerator Physics II in the Tumbleweed room.

5 contributed talks of 12 minutes each.

5:30pm:

G1: SPIN-UP Cracker Barrel & Informal Discussions in Holiday Inn lobby lounge & bar area.

Discussion Facilitator: Michael Marder.

Afternoon Events on the Texas Tech University Campus

2:00pm: Parallel Workshops in the Science Building

D2: AAPT Workshop III in Science Room 119

D3: AAPT Workshop IV in Science Room 120

4:00pm: Parallel Workshops in the Science Building

E2: AAPT Workshop VI in Room 119

E3: AAPT Workshop IV in Room 120

Evening Events at the Texas Tech University International Cultural Center

5:30pm:

G2: Invited Special Presentation on the History of Wine in the International Cultural Center Auditorium.
Invited Speaker: Stefan Estreicher: “Selected Stories from the History of Wine”

7:00pm:

H1: Conference Banquet & after Dinner Talk International Cultural Center Hall of Nations

7:00pm: Social Time, Dinner

7:30pm: Presentations by TSAPS Chair Harry Swinney

7:15pm: TSAAPT Presentations

1. 2012 TSAPS Robert S. Hyer Undergraduate and Graduate Research Awards

2. 2012 TSAPS Distinguished Service Awards

8:00pm: After dinner talk.

Invited Speaker

Ginger Kerrick: “Educational and Professional Success – A Lesson in Resilience and Persistence”.

Saturday, October 27

Morning Events at the Holiday Inn Towers

8:15am:

J1. Plenary Session III in the Petroleum Room

2 invited talks of 45 minutes each, starting at 8:15.

Invited Speakers

1. **Karl Gebhardt:** “From the Inflationary Universe to Black Holes to Dark Energy using the Hobby-Eberly Telescope Dark Energy Experiment”

2. **Michael Marder:** “The Physics of Failure”

9:45am:

Refreshments & Coffee in the common area outside the meeting rooms.

10:15am: Parallel sessions as follows

L1: Atomic, Molecular & Optical Physics I in the Cotton room.

8 contributed talks of 12 minutes each.

L2: Cosmology, General Relativity, & Astrophysics in the Heritage room.

2012 Graduate Robert S. Hyer Research Award Recipient and Contributed Papers

1 invited talk of 30 minutes + 7 contributed talks of 12 minutes each.

Invited Speaker

Yanshi Huang: “The variations of geomagnetic energy and solar irradiance and their impacts on Earth's upper atmosphere”

L3. Invited and Contributed Papers on Physics Education Research in the University Room.

2 invited talks of 35 minutes, plus 6 contributed talks of 12 minutes each.

Invited Speakers

1. **Donna Stokes:** “Implementation of Math Pre-testing and Tutorials for Improving Student Success in the Algebra-based Introductory Physics Course”

2. **Beth Thacker:** “Lessons From a Large-Scale Assessment Project at Texas Tech”

L4. Invited & Contributed Papers on Condensed Matter & Materials Physics in Petroleum Room.

1 invited talk of 35 minutes, plus 9 contributed talks of 12 minutes each.

Invited Speaker

Kelly Nash: “Characterization and Optimization of Multiscale and Multicomponent Systems”

Morning Events on the Texas Tech University Campus

9:00 am: Parallel Workshops in the Science Building

K1: AAPT Workshop VII in Science Room 119.

K2: AAPT Workshop VIII in Science Room 120

11:00am: Parallel Workshops in the Science Building

M1: AAPT Workshop IX in Science Room 119.

M2: AAPT Workshop X in Science Room 120.