# AAPT/PTRA Update

January 2016

### Late Summer/Fall 2015

- Janie Head, Evelyn Restivo, Karen Matsler @ AAPT summer meeting
  - Workshops on geophysics and quantum applications in the classroom
- Steve Henning and George Amann—TIPERS and Ranking Tasks in NJ (20 attendees)
- Dave McCachren and Pat Callahan- Hollywood Physics & Physics Apps @Univ. of Scranton, PA
- Janie Head, Evelyn Restivo, Karen Matsler, Kenric Davies @ State Science Conference (CAST)
  - Inservice K-12 (+600)
- Evelyn Restivo @ TS AAPT Fall meeting—Geophysics
  - Undergraduates, Inservice HS teachers (15 attendees)
- Karen Matsler @ Irving ISD—Perimeter Resources (15 attendees)
- Larry Cook- Perimeter Institute in Nov, CASTLE in Dec and Jan (9 attendees)
- Kenric Davies—@ Sherman HS, CASTLE color coding (4 attendees)

### Summer 2016

- University of Wisconsin River Falls (Earl Blodgett) pay for fee
- Idaho State University (Steve Shropshire) MSP funded
- University of West Georgia (Bob Powell) MSP Funded
- NWOSU (Steve Maier) pending approval
- Alabama (APEX) funded
- UTA/Lee College Meggers Award (Matsler, Okuma) funded
- NASA Heliophysics Grant (AAPT) funded
- PTRA Leadership Institute



## Winter/Spring 2016

- Jan Mader, Karen Matsler--Geophysics session @ W16
  AAPT
- Larry Cook—CASTLE
- Pat Callahan & Dave McCachren—Rocket Science
- Michael Strange—Waterpark Physics
- Evelyn Restivo—ESC 10, Geophysics
- Karen Matsler, Evelyn Restivo, Kenric Davies, Janie Head--TS AAPT Spring meeting

### Social Media Presence

- Facebook = 82 members
- Instagram (aapt\_ptra) = 10 followers
- Twitter (@aapt\_ptra) = 97 followers
- Website = over 4500 visits (2 years)
- NEW: QR code to collect participant information and workshop evaluations

#### The Future

PTRA has been recognized as the main provider for effective and research based professional development in physics. Mini sessions (one day or less) have been shown to be ineffective in sustaining change in classroom practice. Therefore, PTRA continues to seek ways to provide "sustained" professional development as a service to non-AAPT members, at an affordable cost to individuals or districts.

PTRA serves the AAPT community by providing workshops at AAPT conferences, section meetings, and NSTA conferences. All PD focuses on content and pedagogy with the integration of technology and modeling of best practices.

- Provided +35 hours PD to over 265 teachers in 2015
- Provided 2-6 hours PD to over 1350 teachers in 2015

### Goals

- Partner with TYC and 4Yr. Univ. to provide sustainable content focused institutes based on fee-for-service arrangements
- Provide PD targeting elementary and middle school educators who lack content preparation for NGSS and STEM
- Edit/revise current resources to comply with NGSS and Common Core.
- Provide PD to help K-12 educators unify NGSS, physics content, and Reading/Literature. (will require updating of materials)
- Provide PD to help K-12 educators understand NGSS Evidence Statements and alignment with district and state assessments.
- Provide PD in underserved content areas (i.e. quantum) or groups (i.e. elementary, composite science)
- Investigate ways to expand services to educators such as online resources, blended PD opportunities, etc.
- Investigate ways to market materials already developed as well as materials related to and supporting NGSS. (started in 2015 with help of Ramon Lopez)