

## Alliance For Physics Excellence (APEX) Winter Weekend Workshop – Cohort 1 Physics Teacher Institute (PTI) Activity Schedule Alabama A & M University & The University of Alabama in Huntsville



January 15 – 16, 2016

## Day 1 – Friday, January 15, 2016

8:00 AM - 8:15 AM		Welcome/Greetings/Coffee Announcements	Mohan Aggarwal AA&MU and APEX Leadership	
8:15 - 10:00 AM		Engineering Task and Standards	Jim Slavicek Facet Innovations (1 3/4 hours)	
10:00 – 11:00 AM		Planning to elicit and Building on Learner Thinking.	Jim Minstrell, Facet Innovations (1 hour)	
11:00 AM - Noon.		Activity #4 from Teaching about Kinematics: Investigation of a Flashing Light	Jim Nelson AAPT/PTRA (1 hour)	
Noon - 1:15 PM		Buffet lunch at the Bevel Center at UAH (75 minutes)		
1:15 - 2:15 AM		DEMONSTRATION #1: Creation of Sound (e.g., vibrations of ruler, longitudinal propagation, Strobe of Tuning Fork, etc.)	Jim Nelson AAPT/PTRA (1 hour)	
2:15 – 3:15 PM		SOUND ACTIVITY #0: WHAT DOES SOUND LOOK LIKE?	Jim Nelson AAPT/PTRA (1 hour)	
3:15 – 4:15 PM		DEMONSTRATION #2: Properties of sound (e.g., amplitude/loudness, frequency/pitch, wavelength, Longitudinal, etc.)	Jim Nelson AAPT/PTRA (1 hour)	
4:15 – 5:30 PM		SOUND ACTIVITY #1: SPEED OF A SOUND PULSE	Jim Nelson AAPT/PTRA (1 1/4 hours)	
5:30 – 6:15 PM		Start Sound Activity #2: Resonance, Sounds Good to Me	Jim Nelson AAPT/PTRA (3/4 hours)	
6:15 PM	Dinner (On Your Own)			

- <u>Day 1 (Total = 8 3/4 hours)</u>
- Pedagogy = 1 hour
- Engineering Task and Standards = 1 3/4 hours
- **AAPT/PTRA = 6 hours**



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## Day 2 – Saturday, January 16, 2016

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8:00 AM - 9:30 AM		<b>APEX Professional Learning Community: Progress for Partners in Reform</b> (Cohorts 1 and 3 together)	Dennis Sunal (1 1/2 hours) University of Alabama at Tuscaloosa			
9:30 – 10:45 AM		Formative Assessment and Interpreting Using the Diagnoser Teacher Report: Deciding next activities and planning to monitor retention for the whole course.	Jim Minstrell, Facet Innovations (1 1/4 hour)			
10:45 – 11:30 AM		Finish Sound Activity #2: Resonance, Sounds Good to Me	Jim Nelson AAPT/PTRA (3/4 Hour)			
11:30 - 12:30 AM		Topic TBA	Marius Schamschula AA&MU (1 hour)			
12:30 – 1:30 PM		In House Working Lunch: Start SOUND ACTIVITY #3: SPEED OF SOUND SIMULATION (1/2 HOUR)				
1:30 - 2:00 PM		Sound Activity #5: Palm Pipes, A "Handy" Musical Instrument	Jim Nelson AAPT/PTRA (1/2 Hour)			

- <u>Day 1 (Total = 8 3/4 hours)</u>
- Action Research = 0 hours
- Pedagogy = 1 hour
- Engineering Task and Standards = 1 3/4 hours
- **AAPT/PTRA = 6 hours**
- Technology = 0 hours
- Overall Totals = 14 1/4 hours
- Action Research = 1 1/2 hours
- Pedagogy = 2 1/4 hours
- Engineering Task and Standards = 1 3/4 hours
- AAPT/PTRA = 7 3/4 hours
- Technology = 1 hours

- <u>Day 2 (Total = 5 1/2 hours)</u>
- Action Research = 1 1/2 hours
- Pedagogy = 1 1/4 hours
- AAPT/PTRA = 1 3/4 hours
- Technology = 1 hour