

AAPT SM19
PTRA Interest Events

Day	Date	Time	Event	Location	Notes
Saturday	20-Jul	8:00-12:00	Workshop: Fun and Engaging Labs	W8 Held at BYU	Duane Merrell, Wendy Adams: must register or pay in advance \$60, held at BYU
		8:00-12:00	Understanding Mathematical Constructs that Boggle New Physics Students	W12 Held at BYU	Trina Cannon, Kathy Harper, Martha Lietz: must register or pay in advance \$70
		1:00-5:00 PM	LIGO and Interferometers	W16 Held at BYU	This is a session that would be of interest and allows you to receive an interferometer. Cost \$100.
Sunday	21-Jul	8:00-12:00	PTRA: Cartoon Physics	W31 Held at Utah Valley	Kenric Davies: analyzing good and bad physics in cartoons, Cost \$70
		1:00-5:00	Work and Energy	W47 Held at Utah Valley	Gay Stewart: a look at how wording can cause or reinforce misconceptions. Based on her new book which PTRA will be doing workshops on Cost \$60
Monday	22-Jul	7:00 AM-8:30 AM	PTRA Oversight Meeting	CC-Silver Creek	All PTRAs, Committee members , and friends of the committee are invited to attend. Committee chairs will present short update reports
		8:30-10:30	PTRA Make-Play-Do-Learn	CC-Ballroom B	Nina Day: Come and get a variety of ideas for things you can make for a small investment of money and time. Students can make many of these items. These
		8:30-10:30	PTRA Physics of Sound	CC- Ballroom A	Ann Robinson: Sounds are produced with a variety of common objects at stations set up using rulers, tuning forks, straws and toys. These stations will also have a variety of game-like activities involving participants locating sounds from unseen sources, learning about decibels, and calculating the speed of sound. Many of the activities will feature some of "Heck's Physics" as a tribute to Richard Heckthorn and presented by PTRA.
		11:30AM-1:00 PM	HS Committee	MH Canyon	

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		1:30-3:30 PM	PTRA Paper Drag Racers in your Classroom	MH Amphitheatre	Tommi Holsenbeck, Duane Merrell: Physics is NOT a Drag!! (new title) But it can be a drag race. Making paper drag racers is an engaging way to involve students at several grade levels in understanding principles of motion.
		5:15 PM-6:45 PM	Quantum Computing in YOUR Classroom	CC- Ballroom A	Kenric Davies: Quantum computing is an exciting branch of quantum mechanics and has the prospect of making cyber security practically unbreakable. With a simple hands-on demonstration, you can bring the ideas of quantum cryptography into your classroom and model the sending of a message and cipher while learning how an eavesdropper is detected.
		8:30-10:30 PM	HS Share-A-Thon	CC-Ballroom B	
Tuesday	23-Jul	8:30-9:30 AM	Discovery of Gravitational Waves	MH Bryce	(not PTRA session but should be relevant to our workshops)
		8:30-9:30 AM	30 Demos in 60 Minutes	MH Cedar	
		11:30-12:00 PM	Homer Dodge Distinguished Service Citations	Ballroom C	
		12:00-1:30 PM	PIRA Committee	Cascade C	
		12:00-1:30 PM	Pre HS Committee	WH Maple	
		2:00-3:30 PM	Googling it	HS Teacher Lounge	Strange: A session for all HS teachers, especially PTRAs on google forms, apps, and data collection. One we wanted to offer at Provo but Michael could not come
		5:15 PM-6:45 PM	Gravitational Waves	Ballroom B	Matsler:
		7:00-8:30 PM	Picnic	BYU offsite	need ticket
		8:30-9:30 PM	Demo Show	BYU offsite	free