Physics Demonstration Day at Delaware Hayes High School Andrew Borzok's AP Physics Class 10:00 – 10:45 AM November 17, 2017

Event Program (Discussion leaders in parentheses):

- 1. Introductions and Opening Remarks (Derek)
- 2. Roller Coaster Physics: Kinetic and Potential Energy* (Derek)
- 3. Ninja Balls: Elastic Potential Energy* (Dexter)
- 4. Metronome Synchronization: Mechanical Oscillations (Guillo)
- 5. Amazing Jumping Ring: Magnetic Induction and Lenz's Law (Dr. Andereck)
- 6. Discharging a Capacitor: Electrical Energy (Dr. H-K)
- 7. Fire Piston: Thermal Energy and Adiabatic Heating (Shouta)
- 8. The Incredible Shrinking Balloon: Heat Transfer (Nani)
- 9. Nice Cream: Heat Transfer* (Dr. H-K and Guillo)
- * Denotes demonstration suitable for volunteer participation from the audience.