

Experiment category A: Classical Mechanics

- Ballistic trajectory
 - Meteor crater impact
 - Gyroscopic precession
 - The falling chain
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Experiment category B: Resonance and Oscillations

- Vibrating string resonance
 - LRC circuits
 - Damped pendulum
 - Bluff body oscillations
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Experiment category C: Thermodynamics

- Stirling engine efficiency
 - Peltier engine
 - Measurement of the adiabatic index
 - Blackbody radiation
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Experiment category D: Waves and Optics

- Sound wave interference
 - Schlieren imaging
 - Holographic imaging
 - Michelson interferometer
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Experiment category E: Fluid Dynamics

- Flow acceleration in a Venturi tube
 - Viscosity as a function of flow rate
 - Measurement of drag and lift
 - Vortex formation in cyclonic flows
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Experiment category F: Modern Physics

- Measuring the e/m ratio
- Lifetime of the muon
- Measuring the speed of light
- X-ray scattering

****Note:** You may propose an alternative experiment for any of these categories.