

Abstract Submitted  
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**Torsion Oscillator Properties of a Vibrating Mass-Spring-Meter Stick System** MICHAEL STRADLEY<sup>1</sup>, BENSON COLEMAN<sup>2</sup>, STEPHEN ADAMS<sup>3</sup>, Lake Highlands High School — A meter stick pivoted about an axis through its midpoint is connected to a spring on one side of the pivot and a weight on the other side, thus providing a means of vibration of the system. The behavior of the oscillating system is described in terms of torsion oscillator properties. This equivalence to torsion oscillator behavior expands students' insights into the mathematical properties of various systems.

<sup>1</sup>high school student

<sup>2</sup>high school student

<sup>3</sup>high school student

Ken Taylor  
Lake Highlands High School

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