

## LEARNING OBJECTIVES

<b>THE LAMB DYNAMICS SYSTEM</b> Lamb Lamb D'Alembert Newton Equations... Equations	<b>EXAMPLES</b> <ul style="list-style-type: none"> <li>1. Cultural impact (education, religion, medicine, etc.)</li> <li>2. Application to various scientific fields: Astrophysics, medicine, etc.</li> <li>3. Example: Newton's law of gravitation</li> </ul>
<b>THE SIMPLE HARMONIC OSCILLATOR</b> Oscillator Harmonic Amplitude Displacement Frequency	<ul style="list-style-type: none"> <li>1. The simple harmonic oscillator is a system that oscillates about an equilibrium position.</li> <li>2. Examples: Pendulum, mass-spring system, etc.</li> <li>3. Applications: Engineering, physics, etc.</li> </ul>
<b>THE SIMPLE PENDULUM</b> Pendulum Length Displacement Angular Velocity	<ul style="list-style-type: none"> <li>1. The simple pendulum is a mass suspended from a fixed point by a string.</li> <li>2. Applications: Timekeeping, etc.</li> <li>3. Example: Galileo's experiment</li> </ul>
<b>THE SIMPLE PENDULUM</b> Pendulum Length Displacement	<ul style="list-style-type: none"> <li>1. Applications: Timekeeping, etc.</li> <li>2. Example: Galileo's experiment</li> </ul>
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