A Survey of Computational Physics

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Introduction

Pillars of Physics   Computational Applications

- Classical Mechanics $\longrightarrow$ N-Body Simulations & Fluid Dynamics

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• Relativity	$\longrightarrow$	Mercury's Perihelion & Black Hole Ray Tracing

Classical Mechanics

> **Remark**
>
> Given the position and velocity of and the forces acting on an object, the motion of that object is completely determined.

- Everday physics can be completely described by Newton's 2nd Law.

$$\underbrace{\sum_i \mathbf{F}_i = m\ddot{\mathbf{r}}}_{\text{Equation of Motion}} \tag{1}$$

Sample frame title

In this slide, some important text will be highlighted because it's important. Please, don't abuse it.

> **Remark**
> Sample text

> **Important theorem**
> Sample text in red box

> **Examples**
> Sample text in green box. The title of the block is "Examples".

Two-column slide

This is a text in first column.

$$E = mc^2$$

- First item
- Second item

This text will be in the second column and on a second thoughts, this is a nice looking layout in some cases.