

## Central Results from Newton's Principia Mathematica

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### **I. The Body of Least Resistance**

Newton solves a variational problem about 10 years before the curve of quickest descent was found, a topic that is regarded to be the beginning of modern calculus of variations.

### **II . The Force of Attraction of a Spherical Body**

First the geometrical proof of this theorem is analyzed; then it is indicated that this result demonstrates the definitive role of mathematics in modern natural philosophy.

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**16:00 - 18:00**

Instituto Superior Técnico,  
Campus Alameda  
Departamento de Matemática  
Sala 3.10

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