

TUFTS UNIVERSITY
Physics and Astronomy Colloquium

**“The Question of *Mass* in
Newton’s Law of Gravity”**

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As is generally known, if only because of the famous 43 arc-seconds per century discrepancy in the precession of the perihelion Mercury that emerged in the second half of the nineteenth century, Newton’s law of gravity continued to be tested, ever more stringently, in research on celestial orbits over the centuries following publication of his *Principia*. What is not generally known, however, is that the feature of Newton’s law that was most contentious at the time when it was put forward – *that gravitational force is proportional to the inertial mass of the attracting body* – was in no way tested by any of that research. How then, if at all, was this claim ever tested? The talk will review why it was contentious, the history of efforts to test it, and the verification that it finally received, somewhat inadvertently, at the end of the nineteenth century.

3:00 pm

Friday, April 13, 2012

Robinson 253

Medford Campus

Refreshments served at 2:30 in The Knipp Library, Room 251