Temple University Mathematics Colloquium

David Klein

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will speak on

How does general relativity correct the ideal gas law?

ABSTRACT: Curvature in relativistic spacetimes corresponds to tidal forces in Newtonian mechanics, but curvature effects yield more precise information about physical phenomena. In particular, general relativity should provide corrections to calculations based on Newtonian physics for the statistical mechanical/thermodyanmic behavior of a gas subject to a gravitational field. This talk, based on recent papers and ongoing work, presents mathematical methods and theorems needed for such corrections.

Monday, 3 November 2008
Lecture at 4:00 pm
Coffee, tea, and refreshments from 3-5 pm
Room 617, Wachman Building
Department of Mathematics