

Seminar description
8/17/09

FRES 1020, Hidden Dimensions: An Introduction to String Theory, Fall 2009
(M, 3:35-4:25, Room 205, Miller Learning Center)

Instructors:

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Text: Lisa Randall, Warped Passages, Unraveling the Mysteries of the Universe's Hidden Dimensions, Harper, 2005.

General plan: We will discuss what the string theory models of fundamental physics propose to say about particle physics, gravity, and the structure of the universe. The discussion will be based on Randall's recent popular paperback and will aim to be as non-technical as feasible. We will also investigate the arguments for and against string theory. Dr. Randall includes a first hand of her own views on string theory and her involvement in the development of the subject.

Grading: Attendance and participation is expected and then the projected grade is an A for the 1 credit hour (no Tests or Final Exam).

Some other accessible references:

Albert Einstein, The Meaning of Relativity
Brian Greene, The Elegant Universe
Stephen Hawking, A Brief History of Time; The Universe in a Nutshell
Gordon Kane, The Particle Garden
Lee Smolin, The Trouble with Physics
Peter Woit, Not Even Wrong
Idiots Guide to String Theory