**Undergraduate Colloquium**

November 7, PGH 646, 4:15pm

Simple models for complex physical phenomena
--- Professor Stephen Shipman ---

 Louisiana State University



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**Abstract**

Real physical systems are usually too complicated to describe mathematically in detail.  What we try to do instead is to isolate essential features of a system and devise an analytically tractable model system that exhibits those features.  I will illustrate this philosophy with a simple chain of beads connected by springs that nicely exhibits the phenomena of wave propagation and inhibition in crystalline materials as well as confinement of energy at defects.

*Before the talk: recognition and awards for the UH students who scored in the 2012 Putnam Undergraduate Mathematical Competition*

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