

ANALYSIS AND DIFFERENTIAL GEOMETRY  
SEMINAR

*A brief introduction to the the Ising model and phase  
transitions in statistical physics*

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**Abstract:** In this very introductory talk we'll introduce the Ising spin chain model, which is the basic physics model underlying this experiment. The Ising model is extremely simple to describe, and yet its behavior is complex enough to provide a good model for phase transitions in real materials.

The main point of this talk will be to describe how phase transitions (e.g., ice melting to water) are understood in terms of simple statistical physics models.

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MATHEMATICS AND COMPUTER SCIENCE  
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