

## **abstract**

Members Seminar  
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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This talk will review some theorems and conjectures about phase transitions of interacting spin systems in statistical mechanics. A phase transition may be thought of as a change in a typical spin configuration from ordered state at low temperature to disordered state at high temperature. I will illustrate how the symmetry of a spin system plays a crucial role in its qualitative behavior. Of particular interest is the connection between supersymmetric statistical mechanics and the spectral theory of random band matrices.