



复旦大学物理系物质科学报告

Spin glass: Basic physics and interdisciplinary applications

Physics Department Colloquium

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Spin glass, initially introduced by S. Edwards and P. Anderson in 1975 as a simple graphical model for disordered and frustrated magnetic systems, has been developed into a major subfield of statistical physics during the last forty years. In this lecture I will review some of the basic concepts and methods of spin glass mean field theory, and discuss their wide applications in percolation studies and network science (physics), combinatorial optimization problems (computer science), and information processing (information theory and neural science). I will also survey some future interdisciplinary research directions.

Time: 2:00pm, Tuesday, 2016.03.22

Location: Physics Building, Room 221B

(Cookies and coffee are served from 1:30 pm)