

Special Lecture

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Reflection Positivity and Infrared Bounds for Random Loop Models

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Date & Time: Wed, 12/19/2012 - 15:30 - 16:30

Location: S-101

The random loop representations of Toth ('93) and Aizenman-Nachtergaele ('94) can be extended to describe certain $SU(2)$ -invariant spin-1 Heisenberg models. Quantum spin correlations are given in terms of loop correlations. Existence of long-range order can be proved with the method of reflection positivity and infrared bounds of Froehlich, Simon, Spencer ('76). Rather surprisingly, it applies to a regime of parameters where the quantum system is not reflection positive, and the results are distinct from those of Dyson, Lieb, Simon ('78).

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Mon, 12/17/2012 - 14:05

Thu, 01/01/1970 (All day)

terms:

- [School of Mathematics](#)