



Madan Lal Mehta Memorial Lecture – 2011

Random Matrices, Vicious Walkers and Yang-Mills Gauge Theory

by Prof. Satya N. Majumdar
Universite Paris-Sud,

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Lecture Theatre AG 69

Tata Institute of Fundamental Research, 1, Homi Bhabha Road
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In this lecture, Professor Majumdar will discuss the connection between three apparently unrelated subjects: i) Random Matrices that appear in statistics and data analysis, ii) vicious walker model introduced by de Gennes and Fisher, and iii) pure Yang-Mills Gauge Theory in two dimensions on a sphere. They all show the same third order phase transition. This phase transition has now been observed in coupled laser systems.

