ID de Contribution: **21**   Type: **Non spécifié**

Random Field Ising Model and Parisi-Sourlas Supersymmetry - some recent developments

vendredi 29 avril 2022 11:00 (1h 30m)

Numerical simulations of Random Field Ising Model suggest that Parisi-Sourlas supersymmetry and dimensional reduction are present for spatial dimension $d>d\_c$ and are lost for $d<d\_c$, where the critical dimension d_c is somewhere between 4 and 5. I will lecture about a recent theoretical framework, based on perturbative renormalization group, which predicts a mechanism for the loss of supersymmetry and allows to compute the value of d_c. Alternative scenarios will also be discussed.

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