

Théorie conforme des champs et systèmes quantiques à plusieurs corps
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The fate of Parisi-Sourlas Supersymmetry in Random Field Ising model

I will review the status of Parisi-Sourlas supersymmetry in the Random Field Ising model, in the related model of branched polymers, as well as recent work which shows that Parisi-Sourlas supersymmetry is lost for RFIM for $d < d_c \sim 4.5$ because the SUSY fixed point becomes unstable due to dangerously relevant interactions. I will discuss how this might be tested by Monte Carlo simulations in four dimensions.