

A Parisi formula for the ground state energy of the Sherrington-Kirkpatrick model

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Spin glasses are disordered spin systems introduced to understand strange magnetic behaviors of certain alloys in physics. As mathematical objects, they are classical examples of high dimensional complex systems and have provided several fascinating structures and conjectures. In this talk, we will focus on the Sherrington-Kirkpatrick spin glass model. We will present a Parisi formula for the maximum energy and some properties for its landscape. This talk is based on recent joint works with Wei-Kuo Chen.