

Production of 't Hooft-Polyakov monopoles from strong magnetic fields

Thursday 28 November 2019 16:30 (30 minutes)

The production rate of monopoles from strong magnetic fields at high temperatures is determined by an unstable 'sphaleron' field configuration. In this talk I will present the results of a study of this sphaleron in the $SU(2)$ Georgi-Glashow model using lattice techniques. I will show how the sphaleron solution changes as the magnetic field strength is increased, and discuss the implications of our results for the production of solitonic monopoles in physical situations such as heavy-ion collisions.

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