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Gravitational Waves from Mini-Split SUSY

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I will show that color-breaking vacua may develop at high temperature in the Mini-Split SUSY scenario. This can lead to a nontrivial cosmological history of the universe, including strong first order phase transitions and domain wall production. Given the typical PeV energy scale associated with Mini-Split SUSY models, a stochastic gravitational wave background at frequencies around 100 Hz is expected. I will discuss the potential for detection of such a signal in future gravitational wave experiments.

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