

Abstract Submitted  
for the TSS12 Meeting of  
The American Physical Society

**Search for Supersymmetry** ANGEL CAMPOVERDE, Stony Brook University — The Standard Model (SM) describes electromagnetic, weak and strong interactions in an almost satisfactory way. However it cannot be the ultimate theory of nature because it does not describe gravitational forces, it cannot explain neutrino oscillations and needs to be forced to give the right mass to the Higgs boson, of which I will talk. There are models that try to expand the SM to solve these problems. One of these is Supersymmetry (SUSY). I will talk about the WZ model, a toy model that describes a system of four particles with a Supersymmetric Lagrangian, I will talk about its key features and how it solves the problems stated before. I will also talk about a particular way in which SUSY can be broken, General Gauge Mediation, and the way how we can use it to search for SUSY particles. Finally I will talk about experimental data related with the search for SUSY.

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Date submitted: 02 Mar 2012

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