1125-60-2473   **Wei-Kuo Chen*** (`wkchen@umn.edu`), 537 Vincent Hall, 206 Church St. SE, Minneapolis, MN 55455, and **Antonio Auffinger**, **Madeline Handschy** and **Gilad Lerman**. *The energy landscape of the Sherrington-Kirkpatrick model.*

The Sherrington-Kirkpatirck (SK) model is a mean-field spin glass introduced by theoretical physicists in order to explain the strange behavior of certain alloy, such as CuMn. Despite of its seemingly simple formulation, it was conjectured to possess a number of fruitful properties. This talk will be focused on the energy landscape of the SK model. First, we will present a formula for the maximal energy in Parisi's formulation. Second, we will give a description of the energy landscape by showing that near any given energy level between zero and maximal energy, there exist exponentially many equidistant spin configurations. Based on joint works with Auffinger, Handschy, and Lerman. (Received September 20, 2016)