Abstract Submitted
for the MAR15 Meeting of
The American Physical Society

Proteins and Complexity JOELLE MURRAY, DANA GIBBON, ALISSA RUNYON, ARUN BAJRACHARYA, Linfield College — A protein's tertiary structure determines its function in living organisms. The different functions proteins serve necessitate variety in native structures. How is variation in tertiary structure created from a common set of amino acids and molecular forces? In other words, what generates complexity in structures across all types of native proteins? To explore this question, a simple HP model of protein folding was explored for evidence of self-organized criticality, a potential generator of complexity.

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Date submitted: 14 Nov 2014 Electronic form version 1.4