

Abstract Submitted  
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**Complexity and Swarms** KUZIVAKWASHE RUSERE, ALLETA MAIER, JOELLE MURRAY, Linfield College — Complexity is a core characteristic of many systems in nature. What properties and principles unite the various composite systems that exhibit complexity? What drives the emergence of collective phenomena from the distinct actions of individual components of a system? Inspired by recent work by Attanasi et. al that suggests the presence of scaling behavior in natural swarms, a simple stochastic model of swarms was explored for emergent features that may be connected to Self-Organized Criticality, a possible generator of complexity.

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