

## Simon Joyce (Binghamton)

---

### Locally Minimal Energy States in Social Networks

---

#### Abstract for the Combinatorics Seminar 2010 May 4

---

A social network in which everybody knows everyone else can be represented by a complete graph whose nodes represent persons. A sign is associated to each edge; a + sign means the persons are friends and a - sign means the persons are enemies. A 3-cycle (triangle) is called balanced if the product of its edge sign is positive and unbalanced otherwise. A “jammed state” is a sign arrangement such that negating the sign of any edge in the graph does not reduce the number of unbalanced triangles; that is, it is a local minimum for the number of unbalanced triangles. Jammed states with unbalanced triangles have important implications for the development of the social network. I will present some recent results on the properties of these jammed states.

---

From:

<https://www2.math.binghamton.edu/> - **Binghamton University Department of Mathematics and Statistics**

Permanent link:

<https://www2.math.binghamton.edu/p/seminars/comb/abstract.201005joy>

Last update: **2020/01/29 19:03**

