



Quantification of group chasing and escaping process

S. Matsumoto, A. Kamimura, T. Nogawa, T. Shimada, N. Ito, T. Ohira

(Submitted on 31 Mar 2012)

We study a simple group chase and escape model by introducing new parameters with which configurations of chasing and escaping in groups are classified into three characteristic patterns. In particular, the parameters distinguish two essential configurations: a one-directional formation of chasers and escapees, and an escapee surrounded by chasers. In addition, pincer movements and aggregating processes of chasers and escapees are also quantified. Appearance of these configurations highlights efficiency of hunting during chasing and escaping.

Comments: 5 pages, 8 figures

Subjects: **Computational Physics (physics.comp-ph)**; Statistical Mechanics (cond-mat.stat-mech); Physics and Society (physics.soc-ph)

Cite as: [arXiv:1204.0082](#) [physics.comp-ph]
(or [arXiv:1204.0082v1](#) [physics.comp-ph] for this version)

Submission history

From: Shigenori Matsumoto [[view email](#)]

[v1] Sat, 31 Mar 2012 08:06:11 GMT (2779kb)

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