

PUBLICATIONS

Journal

- [5] K. Gajamannage, R. Paffenroth, and E. Bollt. A Nonlinear Dimensionality Reduction Framework Using Smooth Geodesics. Submitted to *Pattern Recognition*.
- [4] K. Gajamannage, E. M. Bollt, M. A. Porter, and M. S. Dawkins. (2017). Modeling the lowest-cost splitting of a herd of cows by optimizing a cost function. *Chaos: An Interdisciplinary Journal of Nonlinear Science*, 27(6), 063114.
- [3] K. Gajamannage and E. M. Bollt. (2017). Detecting phase transitions in collective motion using manifold's curvature. *Mathematical Biosciences and Engineering*. 14(2), 437-453.
- [2] K. Gajamannage, S. Butail, M. Porfiri, and E. M. Bollt. (2015). Dimensionality reduction of collective motion by principal manifolds. *Physica D: Nonlinear Phenomena*, 291, 62-73.
- [1] K. Gajamannage, S. Butail, M. Porfiri, and E. M. Bollt. (2015). Identifying manifolds underlying group motion in Vicsek agents. *European Physical Journal Special Topics*, 224, 3245-3256.

In progress:

- [1] N. Bahadur, R. Paffenroth, and K. Gajamannage. Forecasting the true dimensionality of S&P 500 using the aid of matrix completion. To be submitted to *IEEE Transactions on knowledge and data engineering*.

Conference proceedings

- [1] E. M. Bollt, K. Gajamannage, S. Butail and M. Porfiri. (2014). Model reduction of collective motion by principal manifolds. In *17th U.S. National Congress of Theoretical and Applied Mechanics*, Michigan State University, Michigan, USA.

Abstract

- [1] K. Gajamannage and U.N.B. Dissanayake. (2007). An econometric model for hyperinflation. In *Proceedings of the Peradeniya University Research Sessions (PURSE) 2007*, Sri Lanka, 12(2), 286-287.