Publication List

Published

1. **B. R. Karamched** and P. C. Bressloff. A Delayed Feedback Model of Axonal Length Sensing. *Biophys. J.* 108 2408-2419 (2015)

2. P. C. Bressloff and **B. R. Karamched**. A Frequency-Dependent Decoding Mechanism for Axonal Length Sensing. *Front. Cell. Neurosci.* 9:281.(2015).

3. P. C. Bressloff and **B. R. Karamched**. A Model of Reversible Vesicular Transport with Exclusion. *J. Phys. A.* 49 345602 (2016).

4. **B. R. Karamched** and P. C. Bressloff. Effects of Cell Geometry on Reversible Vesicular Transport. *J. Phys A.* 50 055601 (2017).

5. P. C. Bressloff, **B. R. Karamched**, S. D. Lawley, and E. Levien. Diffusive Transport in the Presence of Stochastically Gated Absorption. *Phys. Rev. E* 96 (2) (2017)

6. P. C. Bressloff and **B. R. Karamched**. Doubly Stochastic Poisson Model of Flagellar Length Control. *SIAM J. Appl. Math.* 78 (2), 719-741 (2018)

7. **B. R. Karamched**, W. Ott, I. Timofeyev, R. N. Alnahhas, M. R. Bennett, and K. Josić. Moran Model of Spatial Alignment in Microbial Colonies. *Physica D: Nonlinear Phenomena*. 395: 1-6 (2019)

8. R. N. Alnahhas, J. J. Winkle, A. J. Hirning, **B. R. Karamched**, W. Ott, K. Josić, and M. R. Bennett. Spatiotemporal Dynamics of Synthetic Microbial Consortia in Microfluidic Devices. *ACS Synthetic Biology* 8: 2051 - 2058 (2019)

9. **B. R. Karamched**, S. Stolarczyk, Z. P. Kilpatrick and K. Josić. Bayesian Evidence Accumulation on Social Networks. *In press in SIAM Journal on Applied Dynamical Systems. arXiv:* 1810.05909.

Complete

1. **B. R. Karamched**, G. Hripcsak, D. J. Albers, and W. Ott. Delay-Induced Uncertainty in Physiological Systems. *Submitted to Journal of Mathematical Biology.*

2. **B. R. Karamched**, M. Stickler, W. Ott, B. Lindner, Z. P. Kilpatrick, and K. Josić. Diversity Improves Speed and Accuracy in Social Networks. *Submitted to Physical Review Letters.*

In Progress

1. **B. R. Karamched**, J. J. Winkle, M. R. Bennett, W. Ott, and K. Josić. Bacterial Cell-Shape Modulation and Induced Population Dynamics.