

David R. Nelson Publications through May 2020

1. Atis, S., B.T. Weinstein, A.W. Murray, and D.R. Nelson, "Microbial range expansions on liquid substrates," *Physical Review X* **9** (2), 021058-24 (2019).
2. Chu, S., M. Kardar, D.R. Nelson, and D.A. Beller, "Evolution in range expansions with competition at rough boundaries," *Journal of Theoretical Biology* **478**, 153-160 (2019).
3. Lavrentovich, M.O. and D.R. Nelson, "Nucleation of antagonistic organisms and cellular competitions on curved, inflating substrates," *Physical Review E* **100** (4), 042406-15 (2019).
4. Tanaka, H. and D.R. Nelson, "Non-Hermitian quasilocalization and ring attractor neural networks," *Physical Review E* **99** (6), 062406-12 (2019).
5. Yllanes, D., D.R. Nelson, and M.J. Bowick, "Folding pathways to crumpling in thermalized elastic frames," *Physical Review E* **100** (4), 042112-10 (2019).
6. Zhang, G.H. and D.R. Nelson, "Eigenvalue repulsion and eigenvector localization in sparse non-Hermitian random matrices," *Physical Review E* **100** (5), 052315-20 (2019).
7. Moshe, M., Esposito, E., Shankar, S., Bircan, B., Cohen, I., Nelson, D.R., and Bowick, M., "Nonlinear mechanics of thin frames," *Physical Review E* **99**, 013002 (2019).
8. Moshe, M., Esposito, E., Shankar, S., Bircan, B., Cohen, I., Nelson, D.R., and Bowick, M., "Kirigami mechanics as stress relief by elastic charges," *Physical Review Letters* **122**, 048001 (2019).
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13. Andrej Kosmrlj and David R. Nelson, "Statistical mechanics of thin spherical shells," *Physical Review X* **7**, 011002 (2017).
14. Bryan T. Weinstein, Maxim O. Lavrentovich, Wolfram Mobius, Andrew W. Murray, and David R. Nelson, "Genetic Drift and Selection in Many-Allele Range Expansion," *PLoS Comput Biol* **13**, (12):e1005866 (2017).
15. Hidenori Tanaka, Howard A. Stone, and David R. Nelson, "Spatial Gene Drives and Pushed Genetic Waves," *PNAS* **114**, 8452-8454 (2017).
16. Thiparat Chotibut and David R. Nelson, "Population Genetics with Fluctuating Population Sizes," *J Stat Phys*, **167**, 777 (2017).
17. Mark Bowick, Andrej Kosmrlj, David R. Nelson, and Rastko Skepnek, "Non-Hookean Statistical Mechanics of Clamped Graphene Ribbons," *Phys. Rev.* **B 95**, 104109 (2017).
18. Daniel A. Beller and David R. Nelson, "Plastic Deformation of Tubular Crystals by Dislocation Glide," *Physical Review E* **94**, 0330004 (2016).
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