



Sreekanth Kizhakkumpurath Manikandan

Postdoctoral Scholar, Chemistry

 Curriculum Vitae available Online

Bio

BIO

I am interested in developing theoretical and computational tools to study dissipative processes at the nanoscale. I also work closely with experimental groups at the interface of biophysics, soft matter physics, and chemistry, and I have contributed to testing our theoretical findings on experimental data.

HONORS AND AWARDS

- Wallenberg Scholarship for postdoctoral research at Stanford, The Wallenberg Foundation (November 2022)

STANFORD ADVISORS

- Grant Rotskoff, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Adaptive nonequilibrium design of actin-based metamaterials: Fundamental and practical limits of control.** *Proceedings of the National Academy of Sciences of the United States of America*
Chennakesavalu, S., Manikandan, S. K., Hu, F., Rotskoff, G. M.
2024; 121 (8): e2310238121
- **Mechano-regulation by clathrin pit-formation and passive cholesterol-dependent tubules during de-adhesion.** *Cellular and molecular life sciences : CMLS*
Mandal, T., Biswas, A., Ghosh, T., Manikandan, S., Kundu, A., Banerjee, A., Mitra, D., Sinha, B.
2024; 81 (1): 43
- **Enhanced directionality of active processes in a viscoelastic bath** *NEW JOURNAL OF PHYSICS*
Das, B., Paul, S., Manikandan, S. K., Banerjee, A.
2023; 25 (9)
- **Inferring entropy production in anharmonic Brownian gyrators** *PHYSICAL REVIEW RESEARCH*
Das, B., Manikandan, S. K., Banerjee, A.
2022; 4 (4)
- **Nonmonotonic skewness of currents in nonequilibrium steady states** *PHYSICAL REVIEW RESEARCH*
Manikandan, S. K., Das, B., Kundu, A., Dey, R., Banerjee, A., Krishnamurthy, S.
2022; 4 (4)
- **Estimating time-dependent entropy production from non-equilibrium trajectories** *COMMUNICATIONS PHYSICS*
Otsubo, S., Manikandan, S. K., Sagawa, T., Krishnamurthy, S.
2022; 5 (1)
- **Quantitative analysis of non-equilibrium systems from short-time experimental data** *COMMUNICATIONS PHYSICS*

Manikandan, S. K., Ghosh, S., Kundu, A., Das, B., Agrawal, V., Mitra, D., Banerjee, A., Krishnamurthy, S.
2021; 4 (1)

- **Equidistant quenches in few-level quantum systems** *PHYSICAL REVIEW RESEARCH*

Manikandan, S. K.
2021; 3 (4)

- **Inferring Entropy Production from Short Experiments.** *Physical review letters*

Manikandan, S. K., Gupta, D., Krishnamurthy, S.
2020; 124 (12): 120603

- **Efficiency Fluctuations in Microscopic Machines.** *Physical review letters*

Manikandan, S. K., Dabelow, L., Eichhorn, R., Krishnamurthy, S.
2019; 122 (14): 140601

- **Asymptotics of work distributions in a stochastically driven system (vol 90, 258, 2018)** *EUROPEAN PHYSICAL JOURNAL B*

Manikandan, S. K., Krishnamurthy, S.
2018; 91 (3)

- **Exact results for the finite time thermodynamic uncertainty relation** *JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL*

Manikandan, S. K., Krishnamurthy, S.
2018; 51 (11)

- **Asymptotics of work distributions in a stochastically driven system** *EUROPEAN PHYSICAL JOURNAL B*

Manikandan, S. K., Krishnamurthy, S.
2017; 90 (12)