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1. A model of thermophoresis of colloidal proteins in water using non-Fickian diffusion currents
Mayank Sharma, Angad Singh and *A. Bhattacharyay*, arXiv:2602.13328v2 [cond-mat.soft] (2026)
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Sahil Satapathy, Projjwal Kanjilal and *A. Bhattacharyay*, arXiv:2601.18764v2 [cond-mat.quant-gas]
3. Hydrodynamic Ratchet for Tracer Transport in a Soft Microchannel: A detailed analysis
Aakash Anand and *A. Bhattacharyay*, arXiv:2510.12492v1 [physics.flu-dyn] (2025)
4. Brownian motion near a wall: the dilemma of Itô or Stratonovich (Topical Review)
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5. Entropic pulling and diffusion diode in an Itô process
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6. Flow cross-overs under surface fluctuations in cylindrical nano-channel
Aakash Anand and *A. Bhattacharyay*, Physics Letters A **553**, 130676 (2025).
7. Itô-distribution from Gibbs measure and a comparison with experiment
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8. Spontaneous-collective transport in a heat bath
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10. Multi-component states for trapped spin-1 Bose-Einstein Condensates in the presence of magnetic field
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13. Random walk model for coordinate-dependent diffusion in a force field
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16. Spin domains in ground state of a trapped spin-1 condensate: A general study under Thomas-Fermi approximation
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19. Probing non-locality of interactions in a Bose-Einstein condensate using solitons
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48. Secondary-ion mass spectrometry and X-ray photoelectrons spectroscopy analysis of α -irradiated Bi-2212 superconductors
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