

## Publications in Journals – 2023

1. Rajkumar Mondal, Nilanjan Chaudhuri, Snigdha Ghosh, Sourav Sarkar, Pradip Roy, “Dilepton production from hot and magnetized hadronic matter”, Physical Review D 107 (2023) 32204
2. Jethin J. Pulikkottil, Arul Lakshminarayan, Shashi C. L. Srivastava, Maximilian F. I. Kieler, Arnd Bäcker, Steven Tomsovic, “Quantum coherence controls the nature of equilibration in coupled chaotic systems”, Physical Review E 107 (2023) 24124
3. Maximilien Barbier, Arseni Goussev, Shashi C. L. Srivastava, “Unbounded quantum backflow in two dimensions”, Physical Review A 107 (2023) 32204
4. Maximilien Barbier, Christopher J Fewster, Arseni Goussev, Gregory V Morozov, Shashi C L Srivastava, “Backflow in relativistic wave equations”, Journal of Physics A 56 (2023) 138003
5. Pranab Bhattachryya , Rahul Biswas , Arijit Dutta , Anjan Dutta Gupta , Anirban De, N. Gayathri , Paramita Mukherjee, “Mechanical design of target holder for irradiation damage experiment at high power”, Nuclear Instruments and Methods in Physics Research A 1052 (2023) 168246
6. B.M.A. Swinton-Bland, J. Buete, D.J. Hinde, M. Dasgupta, T. Tanaka, A.C. Berriman, D.Y. Jeung, K. Banerjee, L.T. Bezzina, I.P. Carter, K.J. Cook, C. Sengupta, C. Simenel, E.C. Simpson, M.A. Stoyer, “Multi-modal mass-asymmetric fission of  $^{178}\text{Pt}$  from simultaneous mass-kinetic energy fitting”, Physics Letters B 837 (2023) 137655
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9. G. Sarwar, Md. Hasanujjaman, J. R. Bhatt, H. Mishra, J. Alam, “Causality and stability of relativistic spin-hydrodynamics”, *Physical Review D* 107 (2023) 54031
10. S. Ghosh, S. Moshat and D. Sanyal, “Magnetic properties of transition metal ion doped AgCuS: an ab-initio calculation”, *Philosophical Magazine* 103 (2023) 87
11. S. K. Kundu, Y. Bailung, Sudhir P. Rode, Partha Pratim Bhaduri and A. Roy, “Effect of various particlization scenarios on anisotropic flow and particle production using UrQMD hybrid model”, *Nuclear Physics A* 1030 (2023) 122574
12. Sayak Chatterjee, Partha Pratim Bhaduri and Subhasis Chattopadhyay, “J/psi yields in low energy nuclear collisions at SPS and FAIR: a baseline estimation”, *Nuclear Physics A* 1029 (2023) 122554
13. CBM-MuCh collaboration, “Test and characterisation of STS/MuCh-XYTER and integration with multiple detectors of CBM-MuCh detector systems”, *Journal of Instrumentation* 18 (2023) P01009
14. Sumit Kumar Kundu, Saikat Biswas, Subhasis Chattopadhyay, Supriya Das, Anand Kumar Dubey, Chandrasekhar Ghosh, Ajit Kumar, Ankhi Roy, Jogender Saini, Susnata Seth, Sidharth Kumar Prasad, “Development of a water-based cooling system for the Muon Chamber detector system of the CBM experiment”, *Nuclear Instruments and Methods in Physics Research A* 1050 (2023) 168143
15. STAR Collaboration, “Pion, kaon, and (anti) proton production in U+U collisions at  $\sqrt{s_{NN}} = 193$  GeV measured with the STAR detector”, *Physical Review C* 107 (2023) 24901
16. STAR Collaboration, “Higher-order cumulants and correlation functions of proton multiplicity distributions in  $\sqrt{s_{NN}} = 3$  GeV Au+Au collisions at the RHIC STAR experiment”, *Physical Review C* 107 (2023) 24908
17. STAR Collaboration, “Beam energy dependence of the linear and mode-coupled flow harmonics in Au+Au collisions”, *Physical Review Letters* 839 (2023) 137755

18. STAR Collaboration, “Azimuthal anisotropy measurement of (multi) strange hadrons in Au+Au collisions at  $\sqrt{s_{NN}} = 54.4$  GeV”, Physical Review C107 (2023) 24912
19. STAR Collaboration, “Beam Energy Dependence of Fifth and Sixth-Order Net-proton Number Fluctuations in Au+Au Collisions at RHIC”, Physical Review Letters 130 (2023) 82301
20. STAR Collaboration, “Search for the Chiral Magnetic Effect in Au+Au collisions at  $\sqrt{s_{NN}} = 27$  GeV with the STAR forward Event Plane Detectors” Physics Letters B 839 (2023) 137779
21. STAR Collaboration, “Measurement of sequential Upsilon suppression in Au+Au collisions at  $\sqrt{s_{NN}} = 200$  GeV with the STAR experiment”, Physical Review Letters 130 (2023) 112301
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26. STAR Collaboration, “ Strange and Multi-strange Particle Production in Au+Au Collisions at  $\sqrt{s_{NN}} = 62.4$  GeV”, Physical Review C 107 (2023) 49903
27. ALICE Collaboration, “Dielectron production at mid-rapidity at low transverse momentum in peripheral and semi-peripheral Pb–Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV”, Journal of High Energy Physics 6 (2023) 24

28. ALICE Collaboration, “Light (anti)nuclei production in Pb-Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV”, Physical Review C 107 (2023) 64904
29. ALICE Collaboration, “Measurement of the production of charm jets tagged with D0 mesons in pp collisions at  $\sqrt{s_{NN}}= 5.02$  and 13 TeV”, Journal of High Energy Physics 6 (2023) 133
30. ALICE Collaboration, “Measurement of  $\psi(2S)$  production as a function of charged-particle pseudorapidity density in pp collisions at  $\sqrt{s}= 13$  TeV and p-Pb collisions at  $\sqrt{s_{NN}} = 8.16$  TeV with ALICE at the LHC”, Journal of High Energy Physics 6 (2023) 147
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35. ALICE Collaboration, “ $K^*(892)0$  and  $\phi(1020)$  production in p-Pb collisions at  $\sqrt{s_{NN}}= 8.16$  TeV”, Physical Review C 107 (2023) 55201
36. ALICE Collaboration, “Observation of flow angle and flow magnitude fluctuations in Pb-Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV at the CERN Large Hadron Collider”, Physical Review C 107 (2023) L051901
37. ALICE Collaboration, “Two-particle transverse momentum correlations in pp and p-Pb collisions at energies available at the CERN Large Hadron Collider”, Physical Review C 107 (2023) 54617
38. ALICE Collaboration, “Anisotropic flow of identified particles in Pb-Pb collisions at  $\sqrt{s_{NN}}=5.02$  TeV”, Journal of High Energy Physics 5 (2023) 243

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41. STAR Collaboration, “Measurements of dielectron production in Au + Au collisions at  $\sqrt{s_{NN}} = 27, 39,$  and  $62.4$  GeV from the STAR experiment”, Physical Review C 107 (2023) L061901
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