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New recipes for nucleus formation at high energies

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Abstract

We present the nuclei formation by using statistical way and by connecting as alternatively to transport models, and develop new approach as in Refs. [1,2] for central nucleus nucleus collisions at high energies. Hybrid model calculations are compared with experimental data. Our preliminary results demonstrate how to analyze new experimental data and propose new experiments. We believe that future experiments from STAR, FAIR, and NICA collaborations will be helpfull to solve puzzling of nuclei formation.

References

- [1] A.S. Botvina, N. Buyukcizmeci and M. Bleicher, Phys. Rev. C 106 (2022) 014607.
- [2] N. Buyukcizmeci, T. Reichert, A.S. Botvina, and M. Bleicher, *submitted to Phys. Rev. C*,(2023),arXiv:2306.17145 [nucl-th]