中国高能核物理网络论坛
HIGH ENERGY NUCLEAR PHYSICS IN CHINA

HENPIC

The 180th HENPIC seminar

3D modeling of the collective behaviors in relativistic heavy-ion collisions

Speaker: Prof. Chun Shen（沈纯）

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Zoom meeting ID: 421 173 735, passcode: 644179

ABSTRACT:

Three-dimensional modeling of relativistic heavy-ion collisions has become an essential phenomenological tool for quantitatively studying Quark-Gluon Plasma's properties. In this seminar, I will discuss building a comprehensive 3D framework to study the collective bulk dynamics in heavy-ion collisions. This framework plays a central role in understanding the stopping dynamics in heavy-ion collisions at O(10) GeV and probes the phase structure of quantum chromodynamics at finite baryon density. It also helps us to explore non-trivial longitudinal dynamics in asymmetric small collision systems at high energies.

ABOUT THE SPEAKER:

Chun Shen is a nuclear theorist and Professor of Physics at the Wayne State University. He obtained Ph.D. in 2014 from Ohio State University, after studying for B.S. at Shanghai Jiao Tong University. He held postdoctoral positions at McGill University and Brookhaven National Laboratory as Goldhaber fellow before joining the Department Physics at Wayne State University as an Assistant professor in 2018. He received APS Dissertation Award in Nuclear Physics and International Union of Pure and Applied Physics Young Scientist Prize in Nuclear Physics 2019. His research interest focuses on the collective behavior of QGP, jet and electromagnetic tomography of strongly coupled systems in heavy ion collisions.

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