



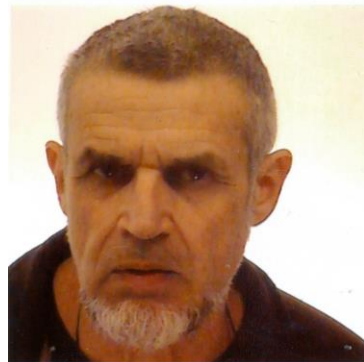
京师核科学论坛第九十四期

题目: Probing Short-Range Correlations
in Nuclei with Hadronic Reactions

主讲人: Eli Piassetzky

时间: 2025年8月20日 (周三) 上午10:00

地点: 京师科技大厦B座1319会议室



报告人介绍: Eli Piassetzky is an emeritus professor at the School of Physics and Astronomy at Tel Aviv University, where he held the Wolfson Chair in Experimental Physics. He earned his Ph.D. from Tel Aviv University in 1981 and later obtained a B.A. in Archaeology in 1999. Over the years, he was a director postdoctoral fellow and staff member at Los Alamos National Laboratory Meson Facility, as well as a visiting scientist at Brookhaven National Laboratory. Prof. Piassetzky has served multiple times as the Chairman of the Nuclear Physics Department. He was also a member of the Nuclear Physics Board (NPB) of the European Physical Society (2011–2017) and was elected a Fellow of the American Physical Society in 2015. He has been a spokesperson for several experiments at major particle accelerators worldwide. His specialties include experimental nuclear physics with high-energy electron, photon, and hadron beams, short-range nuclear structure, and so on.

报告简介: Recent electron-scattering experiments have shown that about 20% of nucleons inside atomic nuclei possess momenta greater than the typical Fermi momentum. This is primarily caused by short-range correlations (SRC)—strong, brief interactions between pairs of nucleons, especially neutron-proton pairs, driven by the fundamental nuclear force. In this talk, I will introduce the concept of SRC, explain their physical significance, and highlight what they teach us about the structure of nuclear matter. I will also discuss how hadron-induced reactions offer unique advantages for studying SRC, complementing the insights gained from electron-based experiments. Finally, I will present exciting prospects for advancing SRC research at China's cutting-edge accelerator facilities, IMP and HAIF.