

Integrability: from mathematics to experiments

Avenue: Center for High Energy Physics, Peking University

(B105, West-building, School of physics, Peking University)

Dec. 23, 2023

Chair: Li-Wen Yang

8:55-9:00 Opening Remark, Bin Chen,

9:00-9:45 1D Hubbard model: From quantum liquid to quantum transport, Xi-Wen Guan

9:45-10:15 Form factor bootstrap and \overline{TT} -deformed EE for IQFT, Miao He

10:15-10:30 Tea Break

10:30-11:15 The Form Factor Program: The Asymptotic Factorization of n-particle SU(N) Form Factors., Hrachya Babujian

11:15-12:00 Superintegrability for matrix models, Weizhong Zhao

11:50-14:00 Lunch

Chair: Yun-Feng Jiang

14:00-14:45 The Iso-BAE Systems: New duality in open spin chains, Yuan Miao

14:45-15:30 Quantum integrable systems on a classical integrable background, Andrii Liashyk

15:30-15:45 Tea Break

15:45-16:30 Wilson-loop One-Point Functions in ABJM Theory, Jun-Bao Wu

16:30-17:15 Langlands Dualities Through Bethe/Gauge Correspondence, Xiang-Mao Ding

17:15-17:45 Exact g-function without strings, Yi-Jun He

18:00 Banquet

Dec. 24, 2023

Chair: Jun-Bao Wu

9:00-9:45 Baxter Q-operators for open spin chains, Bart Hendrik Maarten Vlaar

9:45-10:15 Spin-s Q-systems of SU(N) Spin Chains, Jue Hou

10:15-10:30 Tea Break

10:30-11:15 The quantum integrable model associated with the Shor-Movassagh chain with open boundaries, Kun Hao

11:15-12:00 The exact thermodynamic limit of the XXZ spin chain with arbitrary nondiagonal boundary fields, Yi Qiao

12:00-14:00 Lunch

Chair: Bin Chen

14:00-14:45 Chiral Coordinate Bethe Ansatz for the Periodic XYZ Chain at Roots of Unity, Xin Zhang

14:45-15:30 Elliptic stable envelopes and dynamical R-matrices for super spin chains from 3d N=2 quiver gauge theories, Ye-Hao Zhou

15:30-15:45 Tea Break

15:45-16:30 Identifying quantum many-body integrability and chaos from subsystem trace distance, Jia-Ju Zhang

16:30-17:15 A tale about discovery of quantum E8 particles in quantum material BaCo₂V₂O₈, Jian-Da Wu

17:15-17:30 Conclusion Remark, Yun-Feng Jiang