

Virtual workshop on integrable systems and applications

Time: Oct. 14-15, 2022.

Venue: Online, Tencent Meeting ID: 268-691-439 , Password: 202210

Description: Integrable systems can be loosely defined as set of nonlinear equations which can “in principle” be exactly solved. In the last half a century, the idea of integrability permeates a broad range of disciplines like mathematical physics, representation theory and combinatorics. The aim of this workshop is to bring together some young mathematicians in China working in the area--Integrable Systems and Applications—in order to share their work, foster the exchange of ideas, and encourage collaborations among diverse groups within the community.

Organizers: Xiangke Chang (Chinese Academy of Sciences)

Xiaomeng Xu (Peking University)

Yuancheng Xie (Peking University)

Oct 14th 2022		
8:30-9:15	Dong Wang (University of Chinese Academy of Sciences)	TBA
9:15-10:00	Deng-Shan Wang (Beijing Normal University)	Rarefaction problem of the focusing nonlinear Schrödinger equation
Break!(10mins)		
10:10-10:55	Di Yang (University of Science and Technology of China)	可积系统中的 tau-函数

10:55-11:40	Liming Ling (South China University of Technology)	Darboux transformation and soliton solution to the coupled complex short pulse equation
13:30-14:15	Lun Zhang (Fudan University)	Gap probability for the hard edge Pearcey process
14:15-15:00	Jiaqi Liu (University of Chinese Academy of Sciences)	低正则性空间与黎曼希尔伯特方法——以 mKdV 和 sine-gordon 方程为例
15:00-15:45	Guoqiang Zhang (Chinese Academy of Sciences)	Rogue waves for vector NLS equation
Break!(10mins)		
15:55-16:40	Guofu Yu (Shanghai Jiao Tong University)	The application of Hirota's bilinear method in the construction of rational and semi-rational solutions of integrable equations
16:40-17:25	Kai Tian (China University of Mining & Technology)	A supersymmetric generalized NLS equation: prolongation algebra, linear spectral problems and beyond

Oct 15th 2022		
8:30-9:15	Chao-Zhong Wu (Sun Yat-Sen University)	Drinfeld-Sokolov 方程簇的拓扑解
9:15-10:00	Zhiwei Wu (Sun Yat-Sen University)	Geometric curve flows related to integrable systems
Break!(10mins)		
10:10-10:55	Jinbing Chen (Southeast University)	Periodic standing waves in the DNLS equation: modulational instability and rogue waves
10:55-11:40	Cheng Zhang (Shanghai University)	Aspects of discrete integrable systems
13:30-14:15	Chuanzhong Li (Shandong University of Science and Technology)	Reductions and generalizations of Toda systems
14:15-15:00	Shihao Li (Sichuan University)	On Pfaff lattice
15:00-15:45	Honglei Lang (China Agricultural University)	Rota-Baxter Lie groups
Break!(10mins)		
15:55-16:40	Qing Huang (Northwest University)	Integrable extensions of the rational Calogero-Moser model and related stationary flows
16:40-17:25	Jipeng Cheng (China University of Mining and Technology)	自由费米子与可积系统