第一届数学物理社讲习班

**主题：**

场论，宇宙学，凝聚态，量子信息，动力系统，模形式，代数拓扑等

**简介：**

由南方科技大学数学物理社主办的第一届数学物理社讲习班，定于2024年6月21日于广东省深圳市举办。本次讲习班采用线上和线下相结合的形式，主要面向校内外相关领域的本科生和研究生。通过举办本次讲习班，鼓励本科生和研究生积极参与，分享自己的学习和科研成果，促进学术交流与合作。同时，加强不同学校之间的合作和交流，组织交流活动，打破学术壁垒，促进跨校学术合作。倡导并营造良好的科研氛围，培养学生扎实的科研能力和创新精神，激发学生对科研的热情和兴趣，推动物理学领域的发展和进步。

**日程安排：**

**6月21日**

14：00 – 16：00 报告：量子散射：初识入态

唐鼎文，南方科技大学物理系

16：00 – 16：30 茶歇

16：30 – 18：00 讨论和交流

**6月22日**

9：30 – 12：00 报告：天体物理简介

李秦埙，犹他大学物理系

14：00 – 16：00 报告：多体系统的随机动力学与范畴对称性

李木，南方科技大学量子科学与工程研究院

16：00 – 16：30 茶歇

16：30 – 18：00 讨论和交流

**6月23日**

10：00 – 12：00 报告：宇宙微扰

张骏祺，威斯康辛大学物理系

14：00 – 16：00 报告：从统计物理到动力系统

朱恩沐，南方科技大学数学系

16：00 – 16：30 茶歇

16：30 – 18：00 讨论和交流

**6月24日**

10：30 – 12：00 报告：磁单极子

王俊凯，南京大学物理系

14：00 – 16：00 报告：示性类

陈泽图，南方科技大学数学系

16：00 – 16：30 茶歇

16：30 – 18：00 讨论和交流

**6月25日**

10：00 – 12：00 报告：CFT与相变临界点

祁琼宇，南方科技大学物理系

14：00 – 16：00 报告：阿贝尔-雅可比定理（暂定）

林沈冠霖，南方科技大学数学系

16：00 – 16：30 茶歇

16：00 – 18：00 讨论和交流

**6月26日**

10：00 – 12：00 报告：弹簧链问题

周朗辉，南方科技大学

14：00 – 16：00 报告：数值偏微分方程介绍

袁兆明，南方科技大学数学系，香港理工大学数学系

16：00 – 16：30 茶歇

16：30 – 18：00 讨论和交流

**6月27日**

10：00 – 12：00 报告：时空奇性

赵云柯，南方科技大学物理系

14：00 – 16：00 报告：量子信息-量子基础物理与贝尔非定域性

姚健，南方科技大学物理系

16：00 – 16：30 茶歇

16：30 – 18：00 讨论和交流

**6月28日**

10：00 – 12：00 报告：自相似连续图像的性质

奚敬华，南方科技大学数学系

14：00 – 16：00 报告：广义相对论简介

林宏博（暂定），南方科技大学物理系

16：00 – 16：30 茶歇

16：30 – 18：00 讨论和交流

联系人：赵云柯

E-mail：[Z2267065543@outlook.com](mailto:Z2267065543@outlook.com)

QQ：2267065543

The First Society of Mathematics and Physics Workshop

**Themes:**

Field Theory, Cosmology, Condensed Matter, Dynamical Systems, Modular Forms, Algebraic Topology

**Introduction:**

The first Society of Mathematics and Physics Workshop, organized by the Society of Mathematics and Physics of the Southern University of Science and Technology, is scheduled to be held in Shenzhen City, Guangdong Province on June 21, 2024. This workshop will be conducted in a combined format of online and offline sessions, primarily targeting undergraduate and graduate students in related fields both within and outside the university. By hosting this workshop, the aim is to encourage active participation from undergraduate and graduate students to share their learning and research outcomes, facilitate academic exchange and collaboration. Additionally, it seeks to enhance cooperation and communication among different institutions, organize networking activities, break down academic barriers, promote cross-institutional academic collaborations, promote a conducive research environment, nurture students' solid research capabilities and innovative spirit, ignite students' passion and interest in research, and drive advancements in the field of physics.

**Schedule:**

**June 21**

14:00 – 16:00 Lecture: Quantum Scattering: A Taste of In-State

Dingwen Tang, Department of Physics, Southern University of Science and Technology

16:00 – 16:30 Tea Break

16:30 – 18:00 Discussion and Interaction

**June 22**

9:30 – 12:00 Lecture: Introduction to Astrophysics

Qinxun Li, Department of Physics, University of Utah

14:00 – 16:00 Chaotic Dynamics and Categorical Symmetry

Mu Li, Southern University of Science and Technology Institute for Quantum Science and Engineering

16:00 – 16:30 Tea Break

16:30 – 18:00 Discussion and Interaction

**June 23**

10:00 – 12:00 Lecture: Cosmological Perturbations

Junqi Zhang, Department of Physics, University of Wisconsin

14:00 – 16:00 Lecture: From Statistical Physics to Dynamical Systems

Enmu Zhu, Department of Mathematics, Southern University of Science and Technology

16:00 – 16:30 Tea Break

16:30 – 18:00 Discussion and Interaction

**June 24**

10:30 – 12:00 Lecture: Magnetic Monopoles

Junkai Wang, Department of Physics, Nanjing University

14:00 – 16:00 Lecture: Characteristic Classes

Zetu Chen, Department of Mathematics, Southern University of Science and Technology

16:00 – 16:30 Tea Break

16:30 – 18:00 Discussion and Interaction

**June 25**

10:00 – 12:00 Lecture: CFT and Phase Transition Critical Points

Qiongyu Qi, Department of Physics, Southern University of Science and Technology

14:00 – 16:00 Lecture: Abel-Jacobi Theorem (Tentative)

Shenlin Lin, Department of Mathematics, Southern University of Science and Technology

16:00 – 16:30 Tea Break

16:00 – 18:00 Discussion and Interaction

**June 26**

10:00 – 12:00 Lecture: Spring Chain Problem

Langhui Zhou, Southern University of Science and Technology

14:00 – 16:00 Lecture (To be confirmed)

Zhaoming Yuaan, Department of Mathematics, Southern University of Science and Technology; Department of Mathematics, The Hong Kong Polytechnic University

16:00 – 16:30 Tea Break

16:30 – 18:00 Discussion and Interaction

**June 27**

10:00 – 12:00 Lecture: Spacetime Singularities

Yunke Zhao, Department of Physics, Southern University of Science and Technology

14:00 – 16:00 Lecture: Quantum Information - Quantum Foundations and Bell Nonlocality

Jian Yao, Department of Physics, Southern University of Science and Technology

16:00 – 16:30 Tea Break

16:30 – 18:00 Discussion and Interaction

**June 28**

10:00 – 12:00 Lecture: Properties of Self-Similar Continuous Images

Jinghua Xi, Department of Mathematics, Southern University of Science and Technology

14:00 – 16:00 Lecture: Introduction to General Relativity

Hongbo Lin (Tentative), Department of Physics, Southern University of Science and Technology

16:00 – 16:30 Tea Break

16:30 – 18:00 Discussion and Interaction

Contact Person: Yunke Zhao

E-mail: [Z2267065543@outlook.com](mailto:Z2267065543@outlook.com)

QQ: 2267065543