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Speaker

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Symposium:

All Basic Science Lecture Mathematics Theoretical Physics Theoretical Computer and Information Sciences

Date (UTC+8):

All 2023-07-17 [Mon] 2023-07-18 [Tue] 2023-07-19 [Wed] 2023-07-20 [Thur] 2023-07-21 [Fri]
2023-07-23 [Sun] 2023-07-24 [Mon] 2023-07-25 [Tue] 2023-07-26 [Wed] 2023-07-27 [Thur] 2023-07-28 [Fri]

Hall:

All LH A (A2) Chaoyang Kexie Blue Hall LR1 (A3-1 3F) LR2 (A3-1a 2F) LR3 (A3-1a 2F) LR4 (A3-2 1F)
LR5 (A3-2 3F) LR6 (A3-2a 3F) LR7 (A3-4 1F) LR8 (A3-4 3F) LR9 (A6 1F) LR10 (A7 1F) LR11 (A7 2F)
LR12 (A7 3F) LR13 (A7 3F)

2023-07-17 Mon

LH A (A2) (UTC+8) 2023-07-17 Local Time

08:00-12:30 (UTC+8) 09:00-13:30 Local Time | 07-17 Morning Basic Science Lectures [Basic Science Lecture]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	09:00-10:00	10:00-11:00	Consciousness, robots and DNA [View Abstract]	David Mumford	Division of Applied Mathematics, Brown University
2	10:00-11:00	11:00-12:00	Manifolds in Machine Learning [View Abstract]	Adi Shamir	Weizmann Institute of Science
3	11:20-12:20	12:20-13:20	Generic regularity of free boundaries for the obstacle problem [View Abstract]	Alessio Figalli	ETH Zürich

LR1 (A3-1 3F) (UTC+8) 2023-07-17 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-17 Afternoon Lecture Room 1 (A3-1 3F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:30-14:15	14:30-15:15	On topological cyclic homology [View Abstract]	Thomas Nikolaus	University of Muenster
2	14:30-15:15	15:30-16:15	Martin's maximum ⁺⁺ implies Woodin's axiom (*) [View Abstract]	David Aspero/ Ralf Schindler	University of East Anglia & Universität Münster
3	15:30-16:30	16:30-17:30	The axiom V = Ultimate-L and Goldberg's Ultrapower axiom [View Abstract]	Hugh Woodin	Harvard University

LR2 (A3-1a 2F) (UTC+8) 2023-07-17 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-17 Afternoon Math Lecture Room 2 (A3-1a 2F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:30-14:15	14:30-15:15	On the implosion and singularity formation of a 3D compressible fluid [View Abstract]	Frank Merle	IHÉS & CY Cergy Paris Université
2	14:30-15:30	15:30-16:30	Rough solutions of the 3-D compressible Euler equations [View Abstract]	Qian Wang	University of Oxford
3	15:45-16:30	16:45-17:30	Stabilisation via expansion: global-in-time solutions for compressible Euler flows [View Abstract]	Mahir Hadzic	University College London

LR3 (A3-1a 2F) (UTC+8) 2023-07-17 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-17 Afternoon Math Lecture Room 3 (A3-1a 2F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:30-14:15	14:30-15:15	Integration in Finite Terms for Families of Algebraic Differentials. [View Abstract]	Umberto Zannier	Scuola Normale Superiore
2	14:30-15:15	15:30-16:15	Rational approximations of irrational numbers [View Abstract]	Dimitrios Koukoulopoulos	University of Montreal
3	15:45-16:30	16:45-17:30	Inverse problems and rigidity questions in Billiard dynamics [View Abstract]	Vadim Kaloshin/ Alfonso Sorrentino	Institute of Science and Technology Austria & University of Rome Tor Vergata

LR4 (A3-2 1F) (UTC+8) 2023-07-17 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-17 Afternoon Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:15-14:00	14:15-15:00	The Swampland distance conjecture [View Abstract]	Irene Valenzuela	CERN Institute of Theoretical Physics (IFT) UAM/CSIC
2	14:00-14:45	15:00-15:45	Emergence and the Swampland Distance Conjecture [View Abstract]	Thomas Rudelius	University of California, Berkeley
3	15:00-15:45	16:00-16:45	Measuring randomness of an evaporating black hole [View Abstract]	Ahmed Eid Khamis Thani Almheiri	New York University Abu Dhabi
4	15:45-16:45	16:45-17:45	Geometry of Higher Form Symmetries [View Abstract]	Mirjam Cvetič	University of Pennsylvania

LR5 (A3-2 3F) (UTC+8) 2023-07-17 Local Time

14:30-16:45 (UTC+8) 15:30-17:45 Local Time | 07-17 Afternoon TCIS Lecture Room 5 (A3-2 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	14:30-15:15	15:30-16:15	Intelligent Image-Activated Cell Sorting [View Abstract]	Keisuke Goda	University of Tokyo

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
2	16:00-16:45	17:00-17:45	Microscopy image restoration and artifact removal - from the onset of DL-based methods to most recent improvements [View Abstract]	Florian Jug	Fondazione Human Technopole

LR6 (A3-2a 3F) (UTC+8) 2023-07-17 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-17 Afternoon Math Lecture Room 6 (A3-2a 3F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:30-14:15	14:30-15:15	Hard Lefschetz type theorems without the geometry [View Abstract]	Karim Adiprasito	Hebrew University of Jerusalem
2	14:30-15:15	15:30-16:15	Foam evaluation and its applications [View Abstract]	Louis-Hadrien Robert	Université Clermont Auvergne
3	15:45-16:30	16:45-17:30	Monoidal categorification and quantum affine algebras [View Abstract]	Myungho Kim	Kyung Hee University

LR7 (A3-4 1F) (UTC+8) 2023-07-17 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-17 Afternoon Math Lecture Room 7 (A3-4 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:30-14:30	14:30-15:30	Discrete geometric analysis and its application to materials science [View Abstract]	Motoko Kotani	Tohoku University
2	14:30-15:15	15:30-16:15	Recent progress on completely integrable systems [View Abstract]	Monica Visan	University of California, Los Angeles
3	15:30-16:30	16:30-17:30	Quantum states of matter [View Abstract]	Bruno Nachtergaele	University of California, Davis

LR8 (A3-4 3F) (UTC+8) 2023-07-17 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-17 Afternoon Math Lecture Room 8 (A3-4 3F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:30-14:15	14:30-15:15	The AAA algorithm for rational approximation [View Abstract]	Nick Trefethen	University of Oxford
2	14:30-15:30	15:30-16:30	High order numerical methods for hyperbolic equations [View Abstract]	Chi-Wang Shu	Brown University
3	15:45-16:30	16:45-17:30	On the conjectures of Stark [View Abstract]	Mahesh Kakde	Indian Institute of Science

LR9 (A6 1F) (UTC+8) 2023-07-17 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-17 Afternoon Math Lecture Room 9 (A6 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:30-14:15	14:30-15:15	The $\mathrm{SL}(2, \mathbb{R})$ action on moduli space [View Abstract]	Alex Eskin	University of Chicago
2	14:30-15:15	15:30-16:15	Floer homology beyond borders [View Abstract]	Dylan Thurston	Indiana University Bloomington
3	15:45-16:30	16:45-17:30	Derived moduli spaces of pseudo-holomorphic curves [View Abstract]	John Pardon	Simons Center for Geometry and Physics

LR10 (A7 1F) (UTC+8) 2023-07-17 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-17 Afternoon Math Lecture Room 10 (A7 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:30-14:30	14:30-15:30	Inference for heteroscedastic PCA with missing data [View Abstract]	Jianqing Fan	Princeton University

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
2	14:30-15:15	15:30-16:15	TBA- Stefan Wager [View Abstract]	Stefan Wager	Stanford University
3	15:30-16:30	16:30-17:30	Differences in global tests for dense and sparse alternatives when testing multiple outcomes vs multiple explanatory variables in genetic studies [View Abstract]	Xihong Lin	Harvard University

LR11 (A7 2F) (UTC+8) 2023-07-17 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-17 Afternoon Math Lecture Room 11 (A7 2F) [Mathematics]
[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:30-14:15	14:30-15:15	TBA-Jian Ding [View Abstract]	Jian Ding	Peking University
2	15:45-16:30	16:45-17:30	From physics informed machine learning to physics informed machine intelligence: Quo vadimus? [View Abstract]	George Karniadakis	Brown University

LR12 (A7 3F) (UTC+8) 2023-07-17 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-17 Afternoon TCIS Lecture Room 12 (A7 3F) [Theoretical Computer and Information Sciences]
[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:30-14:30	14:30-15:30	An alternative view on AI: Collaborative learning, incentives, and social welfare [View Abstract]	Michael Jordan	University of California, Berkeley
2	15:15-16:15	16:15-17:15	Statistical methods for estimating cell-type-specific gene co-expressions using single cell and bulk RNA-seq data [View Abstract]	Hongyu Zhao	Yale University

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
3	16:30-17:30	17:30-18:30	Artificial Intelligence for 6G mobile communications [View Abstract]	Jiangzhou Wang	University of Kent

LR13 (A7 3F) (UTC+8) 2023-07-17 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-17 Afternoon TCIS Lecture Room 13 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:30-14:15	14:30-15:15	Quantum-inspired computational imaging [View Abstract]	Vivek Goyal	Boston University
2	14:30-15:45	15:30-16:45	An integrated imaging sensor for aberration-corrected 3D photography [View Abstract]	Lu Fang	Tsinghua University
3	16:00-16:45	17:00-17:45	Information Metasurface – Simultaneous Modulations of Waves and Digital Information in Electromagnetic Space [View Abstract]	Tie Jun Cui	Southeast University

2023-07-18 Tue

LH A (A2) (UTC+8) 2023-07-18 Local Time

17:00-18:00 (UTC+8) 18:00-19:00 Local Time | 07-18 Evening Basic Science Lectures [Basic Science Lecture]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	17:00-18:00	18:00-19:00	TBA [View Abstract]	David Gross	Kavli Institute for Theoretical Physics, University of California, Santa Barbara

LR1 (A3-1 3F) (UTC+8) 2023-07-18 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-18 Afternoon Math Lecture Room 1 (A3-1 3F) [Mathematics]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	The curve and the Langlands program [View Abstract]	Laurent Fargues	Centre National de la Recherche Scientifique (CNRS)
2	15:15-16:00	16:15-17:00	The Ax-Schanuel Conjecture on Shimura varieties [View Abstract]	Ngaiming Mok	University of Hong Kong
3	16:00-17:00	17:00-18:00	The Langlands program and Shimura varieties [View Abstract]	Yihang Zhu	University Maryland, College Park

LR2 (A3-1a 2F) (UTC+8) 2023-07-18 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-18 Afternoon Math Lecture Room 2 (A3-1a 2F) [Mathematics]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	The pressure of quantum gases [View Abstract]	Jan Philip Solovej	University of Copenhagen
2	14:15-15:00	15:15-16:00	A proof of Onsager's Conjecture [View Abstract]	Philip Isett	California Institute of Technology

LR3 (A3-1a 2F) (UTC+8) 2023-07-18 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-18 Afternoon Math Lecture Room 3 (A3-1a 2F) [Mathematics]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	TBA-Damin Wu [View Abstract]	Damin Wu	University of Connecticut
2	14:00-14:45	15:00-15:45	Analytic aspect of constant scalar curvature Kähler metric [View Abstract]	Jingrui Cheng	Stony Brook University
3	15:15-16:00	16:15-17:00	Extension Theorems for differential forms and	Stefan Kebekus/	Albert-Ludwigs-Universität Freiburg

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
			applications [View Abstract]	Christian Schnell	

LR4 (A3-2 1F) (UTC+8) 2023-07-18 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-18 Morning Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Holographic Entanglement and Beyond [View Abstract]	Tadashi Takayanagi	Yukawa Institute for Theoretical Physics, Kyoto University
2	09:15-10:15	10:15-11:15	Semiclassical fluctuations around black holes [View Abstract]	Mukund Rangamani	University of California, Davis
3	10:30-11:30	11:30-12:30	Exotic hadronic states and hadron structure [View Abstract]	Bingsong Zou	Institute of Theoretical Physics, Chinese Academy of Sciences

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-18 Afternoon Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	The Count of Instantons [View Abstract]	Nikita Nekrasov	Simons Center for Geometry and Physics
2	14:00-14:45	15:00-15:45	An exact AdS/CFT duality [View Abstract]	Matthias Gaberdiel	ETH Zürich
3	15:15-16:15	16:15-17:15	Particle Physics and Its Future --- and Opportunities for China [View Abstract]	Yifang Wang	Institute of High Energy Physics, Chinese Academy of Sciences

LR7 (A3-4 1F) (UTC+8) 2023-07-18 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-18 Morning Math Lecture Room 7 (A3-4 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	09:15-10:15	10:15-11:15	Novikov' s problem: from physics of metals to modern dynamical systems [View Abstract]	Alexandra Skripchenko	Higher School of Economics
2	10:30-11:30	11:30-12:30	Large genus universality phenomena in geometry and dynamics of moduli spaces of Riemann surfaces [View Abstract]	Anton Zorich	University Paris Cité

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-18 Afternoon Math Lecture Room 7 (A3-4 1F) [Mathematics]
Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Large Genus Asymptotics in Flat Surfaces [View Abstract]	Amol Aggarwal	Columbia University & Clay Mathematics Institute
2	14:00-14:45	15:00-15:45	Diffeomorphism groups of discs [View Abstract]	Manuel Krannich	Karlsruhe Institute of Technology
3	15:15-16:00	16:15-17:00	Smooth surface dynamics in positive entropy [View Abstract]	Jérôme Buzzi/ Sylvain Crovisier	Centre National de la Recherche Scientifique (CNRS)
4	16:00-17:00	17:00-18:00	Dynamics of complex Hénon maps [View Abstract]	Dinh Tien Cuong	National University of Singapore

LR9 (A6 1F) (UTC+8) 2023-07-18 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-18 Morning Math Lecture Room 9 (A6 1F) [Mathematics]
Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Classification of algebraic varieties [View Abstract]	Caucher Birkar	Yau Mathematical Sciences Center, Tsinghua University
2	09:15-10:15	10:15-11:15	Area-minimizing integral currents: singularities and structure [View Abstract]	Camillo De Lellis	Institute for Advanced Study

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
3	10:30-11:30	11:30-12:30	A mathematical definition of Coulomb branches of 3-dimensional $N=4$ gauge theories [View Abstract]	Hiraku Nakajima	Kavli Institute for the Physics and Mathematics of the Universe (IPMU), University of Tokyo

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-18 Afternoon Math Lecture Room 9 (A6 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Nearby Lagrangians [View Abstract]	Mohammed Abouzaid	Stanford University
2	14:00-14:45	15:00-15:45	The symplectic geometry of knot conormals and knot invariants [View Abstract]	Tobias Ekholm	Uppsala Universitet
3	15:15-16:00	16:15-17:00	Homotopy vs isotopy in smooth 4-manifold topology [View Abstract]	David Gabai	Princeton University
4	16:15-17:00	17:15-18:00	Knot concordance and 4-manifolds [View Abstract]	Lisa Piccirillo	Massachusetts Institute of Technology

LR10 (A7 1F) (UTC+8) 2023-07-18 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-18 Morning Math Lecture Room 10 (A7 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	09:15-10:15	10:15-11:15	Link homology and categorification [View Abstract]	Mikhail Khovanov	John Hopkins University & Columbia University
2	10:30-11:30	11:30-12:30	Knot and surfaces in dimension four [View Abstract]	András Stipsicz	Alfréd Rényi Institute of Mathematics

LR11 (A7 2F) (UTC+8) 2023-07-18 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-18 Afternoon TCIS Lecture Room 11 (A7 2F) [Theoretical Computer and Information Sciences]

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LR12 (A7 3F) (UTC+8) 2023-07-18 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-18 Morning TCIS Lecture Room 12 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Robotics, AI, and real-world challenges [View Abstract]	Kazuhiro Kosuge	University of Hong Kong
2	09:15-10:15	10:15-11:15	On Recommendations via Large Multi-modal Models [View Abstract]	Philip S. Yu	University of Illinois Chicago
3	10:30-11:30	11:30-12:30	Mapping and Predicting Protein Dynamics in Living Cells [View Abstract]	Bo Huang	University of California, San Francisco

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-18 Afternoon TCIS Lecture Room 12 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Bone-inspired infill optimization for additive manufacturing [View Abstract]	Jun Wu	Delft University of Technology
2	14:00-14:45	15:00-15:45	What makes a good 3D representation? [View Abstract]	Yue Wang	University of Southern California
3	15:15-16:00	16:15-17:00	Neural Radiance Fields for View Synthesis and Beyond [View Abstract]	Ravi Ramamoorthi	University of California, San Diego
4	16:15-17:00	17:15-18:00	Robot active perception and motion generation for deformable object manipulation using multimodal deep learning [View Abstract]	Namiko Saito	University of Edinburgh

LR13 (A7 3F) (UTC+8) 2023-07-18 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-18 Morning TCIS Lecture Room 13 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Brain activity , numbers in the brain and reading your thoughts [View Abstract]	Mina Teicher	University of Miami
2	09:15-10:15	10:15-11:15	Nano science of the universe [View Abstract]	Ningsheng Xu	Fudan University
3	10:30-11:30	11:30-12:30	Classification program of counting problems [View Abstract]	Jin-Yi Cai	University of Wisconsin, Madison

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-18 Afternoon TCIS Lecture Room 13 (A7 3F) [Theoretical Computer and Information Sciences]

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NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	14:00-14:45	15:00-15:45	Need for speed: high-performance algorithms in genomics [View Abstract]	Heng Li	Dana-Farber Cancer Institute & Harvard Univeristy
2	15:15-16:00	16:15-17:00	Contrastive learning of visual representations [View Abstract]	Ting Chen	Google
3	16:15-17:00	17:15-18:00	Towards scalable and automatic neural network training [View Abstract]	Cho-Jui Hsieh	University of California, Los Angeles

2023-07-19 Wed

LR1 (A3-1 3F) (UTC+8) 2023-07-19 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-19 Afternoon Math Lecture Room 1 (A3-1 3F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Smith-Treumann theory and modular representations of reductive groups [View Abstract]	Simon Riche	Université Clermont Auvergne

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
2	14:00-14:45	15:00-15:45	BPS cohomology and representation theory [View Abstract]	Ben Davison	University of Edinburgh
3	15:00-16:00	16:00-17:00	Advances on the generalized Gorenstein Symmetry conjecture [View Abstract]	Ioannis Emmanouil	National Kapodistrian University of Athens

LR2 (A3-1a 2F) (UTC+8) 2023-07-19 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-19 Morning Math Lecture Room 2 (A3-1a 2F) [Mathematics]
Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	09:15-10:15	10:15-11:15	Nonlinear stability of slowly rotating Kerr black holes [View Abstract]	Sergiu Klainerman	Princeton University

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-19 Afternoon Math Lecture Room 2 (A3-1a 2F) [Mathematics]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	On the low-regularity inextendibility of singular spacetimes: Schwarzschild and beyond [View Abstract]	Jan Sbierski	University of Edinburgh
2	14:00-14:45	15:00-15:45	The global non-linear stability of the Kerr-de Sitter family of black holes [View Abstract]	Peter Hintz	ETH Zürich
3	15:15-16:00	16:15-17:00	On Kerr Stability Conjecture [View Abstract]	Siyuan Ma	Academy of Mathematics and Systems Science, Chinese Academy of Science

LR3 (A3-1a 2F) (UTC+8) 2023-07-19 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-19 Afternoon Math Lecture Room 3 (A3-1a 2F) [Mathematics]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Confluence relations for iterated integrals [View Abstract]	Nobuo Sato	National Taiwan University
2	14:00-14:45	15:00-15:45	E-functions and Geometry [View Abstract]	Peter Jossen	King's College London
3	15:15-16:00	16:15-17:00	The Möbius disjointness conjecture of Sarnak for ergodic weights [View Abstract]	Nikos Frantzikinakis	University of Crete
4	16:00-17:00	17:00-18:00	Irrational numbers and where to find them [View Abstract]	Simon Kristensen	Aarhus University

LR4 (A3-2 1F) (UTC+8) 2023-07-19 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-19 Morning Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Formation of Merging Compact Binaries [View Abstract]	Dong Lai	Cornell University
2	09:15-10:15	10:15-11:15	On Corrollian conformal field theory [View Abstract]	Bin Chen	Peking University
3	10:30-11:30	11:30-12:30	The interior structure of hairy black holes [View Abstract]	Rong-Gen Cai	Institute of Theoretical Physics, Chinese Academy of Sciences

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-19 Afternoon Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	The measurement-induced entanglement phase transition [View Abstract]	Brian Skinner	Ohio State University
2	14:00-14:45	15:00-15:45	Field Theoretic Approach to Eliashberg Theory with Repulsive Interactions [View Abstract]	Jonathan Ruhman	Bar Ilan University

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
3	15:15-16:15	16:15-17:15	Marginal triviality of the 4D Ising model [View Abstract]	Hugo Duminił-Copin	Université de Genève
4	16:15-17:00	17:15-18:00	TBA-Geoffrey Penington [View Abstract]	Geoffrey Penington	University of California, Berkeley

LR7 (A3-4 1F) (UTC+8) 2023-07-19 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-19 Morning Math Lecture Room 7 (A3-4 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	09:15-10:15	10:15-11:15	Moments of Characteristic Polynomials of Random Unitary Matrices [View Abstract]	Jonathan Keating	University of Oxford
2	10:30-11:30	11:30-12:30	Discrete conformality and beyond. Where geometry meets computer graphics and mathematical physics [View Abstract]	Alexander Bobenko	Technical University Berlin

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-19 Afternoon Math Lecture Room 7 (A3-4 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	A class of functionals with duality [View Abstract]	Xu-Jia Wang	Australian National University
2	14:00-14:45	15:00-15:45	Boundary regularity in optimal transportation [View Abstract]	Shibing Chen	University of Science and Technology of China
3	15:00-16:00	16:00-17:00	Optimal Liouville theorems for fully nonlinear conformally invariant equations [View Abstract]	Yanyan Li	Rutgers University
4	16:15-17:00	17:15-18:00	Stable solutions to semilinear elliptic equations are smooth up to dimension 9 [View Abstract]	Xavier Cabre	Institució Catalana de Recerca i Estudis Avançats (ICREA) & Universitat Politècnica de Catalunya

LR8 (A3-4 3F) (UTC+8) 2023-07-19 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-19 Morning Math Lecture Room 8 (A3-4 3F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	09:15-10:15	10:15-11:15	Deformations of Fano manifolds with weighted solitons [View Abstract]	Akito Futaki	Yau Mathematical Sciences Center, Tsinghua University
2	10:30-11:30	11:30-12:30	Bubbling of Kähler-Einstein metrics [View Abstract]	Song Sun	University of California, Berkeley

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-19 Afternoon Math Lecture Room 8 (A3-4 3F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Recent progress towards the Yau-Tian-Donaldson conjecture [View Abstract]	Sebastien Boucksom	Centre National de la Recherche Scientifique (CNRS) & Sorbonne Université
2	14:00-15:00	15:00-16:00	Minimal surfaces in negatively curved manifolds [View Abstract]	André Neves	University of Chicago
3	15:15-16:00	16:15-17:00	On the Multiplicity One Conjecture in min-max theory [View Abstract]	Xin Zhou	Cornell University
4	16:15-17:00	17:15-18:00	TBA-Richard Bamler [View Abstract]	Richard Bamler	University of California, Berkeley

LR9 (A6 1F) (UTC+8) 2023-07-19 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-19 Morning Math Lecture Room 9 (A6 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Complex metrics in QFT [View Abstract]	Maxim Kontsevich	Institut des Hautes Études Scientifiques (IHÉS)
2	10:30-11:30	11:30-12:30	Heterogeneous gaussian process modeling with applications [View Abstract]	Jun Liu	Harvard University

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-19 Afternoon Math Lecture Room 9 (A6 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	14:00-15:00	15:00-16:00	Complete Solution to the Most General Nonlinear Filtering Problems with the Capability of Overcoming the Curse of Dimensionality [View Abstract]	Stephen Yau	Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)
2	15:15-16:00	16:15-17:00	On deep learning as a remedy for the curse of dimensionality in nonparametric regression [View Abstract]	Benedikt Bauer	Technische Universität Darmstadt
3	16:00-17:00	17:00-18:00	Deep Approximation via Deep Learning [View Abstract]	Zuwei Shen	National University of Singapore

LR11 (A7 2F) (UTC+8) 2023-07-19 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-19 Afternoon TCIS Lecture Room 11 (A7 2F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	QSYM: Practical Concolic Execution And Hybrid Fuzzing [View Abstract]	Meng Xu	University of Waterloo
2	14:00-14:45	15:00-15:45	Off-path TCP exploits of the mixed IPID assignment [View Abstract]	Ke Xu	Tsinghua University

LR12 (A7 3F) (UTC+8) 2023-07-19 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-19 Morning TCIS Lecture Room 12 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	DM & TCS [View Abstract]	Noga Alon	Princeton University

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
			Abstract]		
2	09:15-10:15	10:15-11:15	Medical robotics for cell surgery [View Abstract]	Yu Sun	University of Toronto
3	10:30-11:30	11:30-12:30	Robotics and wearable technology (exoskeletons) for better health [View Abstract]	Darwin G Caldwell	Italian Institute of Technology

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-19 Afternoon TCIS Lecture Room 12 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Convergence of computer vision and natural language processing [View Abstract]	Han Hu	Microsoft Research Asia
2	14:00-14:45	15:00-15:45	Tetrahedral meshing in the wild [View Abstract]	Yixin Hu	Tencent America
3	15:15-16:00	16:15-17:00	Agile Robot Autonomy [View Abstract]	Antonio Loquercio	University of California, Berkeley
4	16:15-17:00	17:15-18:00	Intelligent microrobots and their potential impact on healthcare [View Abstract]	Bradley Nelson	ETH Zürich

LR13 (A7 3F) (UTC+8) 2023-07-19 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-19 Morning TCIS Lecture Room 13 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	09:15-10:15	10:15-11:15	On computation of Markov perfect equilibrium [View Abstract]	Xiaotie Deng	Peking University
2	10:30-11:30	11:30-12:30	Post-quantum cryptography, a new era. [View Abstract]	Jintai Ding	Tsinghua University

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-19 Afternoon TCIS Lecture Room 13 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	The 2-to-1 Games Theorem [View Abstract]	Muli Safra	Tel Aviv University
2	15:15-16:00	16:15-17:00	Locally testable codes with constant rate, distance, and locality [View Abstract]	Shai Evra	Hebrew University of Jerusalem, Israel
3	16:15-17:00	17:15-18:00	The unlimited sensing framework: Digitization via modulo non-linearities [View Abstract]	Ayush Bhandari	Imperial College London

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LR1 (A3-1 3F) (UTC+8) 2023-07-20 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-20 Afternoon Math Lecture Room 1 (A3-1 3F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Rigidity of lattices in Lie groups [View Abstract]	Sebastian Hurtado	Yale University
2	14:00-14:45	15:00-15:45	Hyperbolic manifolds [View Abstract]	Bruno Martelli	Università di Pisa
3	15:15-16:00	16:15-17:00	Sums of squares, positivity and property (T) for $\text{Aut}(Fn)$ [View Abstract]	Marek Kaluba	Karlsruher Institut für Technologie
4	16:15-17:00	17:15-18:00	Structures and computations in the motivic stable homotopy categories [View Abstract]	Hana Jia Kong	Institute for Advanced Study

LR2 (A3-1a 2F) (UTC+8) 2023-07-20 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-20 Afternoon Math Lecture Room 2 (A3-1a 2F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Interlacing methods in Extremal Combinatorics [View Abstract]	Hao Huang	National University of Singapore
2	14:00-14:45	15:00-15:45	Improved Sunflower Bounds and Their Applications [View Abstract]	Jiapeng Zhang	University of Southern California
3	15:15-16:00	16:15-17:00	High-dimensional expansion, matroids, and log-concave polynomials [View Abstract]	Nima Anari	Stanford University
4	16:15-17:00	17:15-18:00	Fuglede's conjecture for convex bodies [View Abstract]	Máté Matolcsi	Alfréd Rényi Institute of Mathematics & Budapest University of Technology and Economics

LR3 (A3-1a 2F) (UTC+8) 2023-07-20 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-20 Morning Math Lecture Room 3 (A3-1a 2F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Multiplicative Jensen's formula, dual Lyapunov exponents, and global theory of one-dimensional analytic quasiperiodic operators [View Abstract]	Svetlana Jitomirskaya	University of California, Irvine

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-20 Afternoon Math Lecture Room 3 (A3-1a 2F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	TBA-Hugo Falconet [View Abstract]	Hugo Falconet	Courant Institute, New York University
2	14:00-14:45	15:00-15:45	How to build a random surface [View Abstract]	Scott Sheffield	Massachusetts Institute of Technology
3	15:00-16:00	16:00-17:00	Anomalous random walks and scaling limits: from fractals to random media [View Abstract]	Takashi Kumagai	Waseda University

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
4	16:15-17:00	17:15-18:00	TBA-Aran Raoufi [View Abstract]	Aran Raoufi	Citadel Securities

LR4 (A3-2 1F) (UTC+8) 2023-07-20 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-20 Morning Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Astrophysical Probes to New Physics Beyond the Standard Model [View Abstract]	Yue Zhao	University of Utah
2	09:15-10:15	10:15-11:15	Geometric phases old and new [View Abstract]	Michael Berry	University of Bristol
3	10:30-11:30	11:30-12:30	Density-matrix and tensor-network renormalization [View Abstract]	Tao Xiang	Institute of Physics, Chinese Academy of Sciences

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-20 Afternoon Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Emergent phenomena in monitored quantum systems [View Abstract]	Xiao Chen	Boston College
2	14:00-14:45	15:00-15:45	Landscape of quantum phases in quantum materials [View Abstract]	Liu Jun Zou	Perimeter Institute for Theoretical Physics
3	15:15-16:00	16:15-17:00	Light-ray operators and Regge trajectories in CFTs [View Abstract]	Petr Kravchuk	King's College London
4	16:15-17:00	17:15-18:00	Scattering Amplitudes and Gravitational Wave Physics [View Abstract]	Mao Zeng	University of Edinburgh

LR7 (A3-4 1F) (UTC+8) 2023-07-20 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-20 Morning Math Lecture Room 7 (A3-4 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Helgason-Fourier analysis on hyperbolic spaces and sharp geometric and functional inequalities [View Abstract]	Guozhen Lu	University of Connecticut

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-20 Afternoon Math Lecture Room 7 (A3-4 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	One can hear the shape of nearly circular ellipses [View Abstract]	Hamid Hezari	University of California, Irvine
2	14:00-14:45	15:00-15:45	Curvature and harmonic analysis on compact manifolds [View Abstract]	Christopher Sogge	Johns Hopkins University
3	15:15-16:00	16:15-17:00	Incidence estimates and Fourier analysis [View Abstract]	Ruixiang Zhang	University of California, Berkeley
4	16:15-17:00	17:15-18:00	Sharp estimates for oscillatory integral operators via polynomial partitioning [View Abstract]	Marina Iliopoulou	University of Birmingham

LR8 (A3-4 3F) (UTC+8) 2023-07-20 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-20 Morning Math Lecture Room 8 (A3-4 3F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	10:30-11:30	11:30-12:30	Emergence of regularity in large graphs [View Abstract]	Benjamin Sudakov	ETH Zürich

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-20 Afternoon Math Lecture Room 8 (A3-4 3F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Sharp Arithmetic Spectral Transition and Universal Hierarchical Structure for Supercritical Almost Mathieu Operators [View Abstract]	Wencai Liu	Texas A&M University
2	14:00-14:45	15:00-15:45	Classification of simple Z -stable C^* -algebras [View Abstract]	Huaxin Lin	East China Normal University & University of Oregon
3	15:00-15:45	16:00-16:45	TBA-Yuhei Suzuki [View Abstract]	Yuhei Suzuki	Hokkaido University
4	16:00-17:00	17:00-18:00	Quantum symmetries in operator algebras and mathematical physics [View Abstract]	Yasuyuki Kawahigashi	University of Tokyo

LR9 (A6 1F) (UTC+8) 2023-07-20 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-20 Morning Math Lecture Room 9 (A6 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	A infinity category and Floer homology [View Abstract]	Kenji Fukaya	Simons Center for Geometry and Physics
2	09:15-10:15	10:15-11:15	On quantum groups and quantum cohomology [View Abstract]	Andrei Okounkov	Columbia University
3	10:30-11:30	11:30-12:30	Mathematics and Machine Learning [View Abstract]	Sergei Gukov	California Institute of Technology & Dublin Institute for Advanced Studies

LR10 (A7 1F) (UTC+8) 2023-07-20 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-20 Morning Math Lecture Room 10 (A7 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	10:30-11:30	11:30-12:30	Some recent extensions of the Weinstein conjecture [View Abstract]	Michael Hutchings	University of California, Berkeley

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-20 Afternoon Math Lecture Room 10 (A7 1F) [Mathematics]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	15:00-16:00	16:00-17:00	Constructing SYZ mirror via Maurer-Cartan equation [View Abstract]	Nai Chung Leung	Chinese University of Hong Kong

LR12 (A7 3F) (UTC+8) 2023-07-20 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-20 Morning TCIS Lecture Room 12 (A7 3F) [Theoretical Computer and Information Sciences]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	A geometric understanding of generative model in deep learning [View Abstract]	Xianfeng Gu	Stony Brook University
2	09:15-10:15	10:15-11:15	TBA-Song-Chun Zhu [View Abstract]	Song-Chun Zhu	Beijing Institute for General Artificial Intelligence
3	10:30-11:30	11:30-12:30	The COVID-19 Pandemic: What Social Media and Machine Learning Can Inform Us at Scale and in Real-time [View Abstract]	Jiebo Luo	University of Rochester

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-20 Afternoon TCIS Lecture Room 12 (A7 3F) [Theoretical Computer and Information Sciences]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Almost linear time algorithms for all flows [View Abstract]	Sushant Sachdeva	University of Toronto
2	14:00-14:45	15:00-15:45	Approximation Algorithms for the Asymmetric Traveling Salesman Problem [View Abstract]	László Végh	London School of Economics and Political Science
3	15:15-16:00	16:15-17:00	Practical Network Intrusion Detection with Deep Learning [View Abstract]	Yisroel Mirsky	Ben-Gurion University of the Negev

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
4	16:15-17:00	17:15-18:00	Functional bayesian filter [View Abstract]	Kan Li	University of Florida

LR13 (A7 3F) (UTC+8) 2023-07-20 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-20 Afternoon TCIS Lecture Room 13 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	14:00-14:45	15:00-15:45	Analysis of animal behavior with deep learning [View Abstract]	Alexander Mathis	École Polytechnique Fédérale de Lausanne (EPFL)
2	15:15-16:00	16:15-17:00	Adversarial Robustness of Graph Neural Networks [View Abstract]	Daniel Zügner	Microsoft Research
3	16:15-17:00	17:15-18:00	Knowledge graphs empower AI applications: recommendation and beyond [View Abstract]	Xiang Wang	University of Science and Technology of China

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LR1 (A3-1 3F) (UTC+8) 2023-07-21 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-21 Afternoon Math Lecture Room 1 (A3-1 3F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	Hausdorff Measures and Co-Analytics Sets [View Abstract]	Theodore Slaman	University of California, Berkeley
2	14:00-15:00	15:00-16:00	Phase transitions for Gödel incompleteness [View Abstract]	Andreas Weiermann	Ghent University

LR2 (A3-1a 2F) (UTC+8) 2023-07-21 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-21 Morning Math Lecture Room 2 (A3-1a 2F) [Mathematics][Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	An index theory for manifolds with polyhedral boundary and Gromov' s dihedral extremality and rigidity conjectures [View Abstract]	Guoliang Yu	Texas A&M University
2	10:30-11:30	11:30-12:30	From Hardy to Rellich inequalities on graphs [View Abstract]	Matthias Keller	University of Potsdam

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-21 Afternoon Math Lecture Room 2 (A3-1a 2F) [Mathematics][Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Moduli space of Fano varieties [View Abstract]	Yuchen Liu	Northwestern University
2	14:00-15:00	15:00-16:00	The null-categories of noncommutative resolutions [View Abstract]	Alexey Bondal	Steklov Mathematical Institute
3	15:15-16:00	16:15-17:00	Birational types [View Abstract]	Yuri Tschinkel	New York University
4	16:00-17:00	17:00-18:00	Complements [View Abstract]	Vyacheslav V Shokurov	Johns Hopkins University

LR3 (A3-1a 2F) (UTC+8) 2023-07-21 Local Time**08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-21 Morning Math Lecture Room 3 (A3-1a 2F) [Mathematics]**[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	On local rigidity of linear abelian actions on the torus [View Abstract]	Bassam Fayad	University Maryland, College Park
2	10:30-11:30	11:30-12:30	Factorization of the Weyl character at special elements [View Abstract]	Dipendra Prasad	Indian Institute of Technology

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-21 Afternoon Math Lecture Room 3 (A3-1a 2F)
[Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Counting ℓ -adic local systems over a curve [View Abstract]	Hongjie Yu	Weizmann Institute of Science

LR4 (A3-2 1F) (UTC+8) 2023-07-21 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-21 Morning Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	How Effective is the Standard Model of Particle Physics? [View Abstract]	John Ellis	King's College London
2	09:15-10:15	10:15-11:15	Long lived particles and the future of particle physics [View Abstract]	Jonathan Feng	University of California, Irvine
3	10:30-11:30	11:30-12:30	Cosmological late-time attractors and string theory [View Abstract]	Gary Shiu	University of Wisconsin-Madison

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-21 Afternoon Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	Solving Quantum Field Theory [View Abstract]	Francesco Sannino	University of Southern Denmark
2	14:00-14:45	15:00-15:45	Geometries, particles and strings [View Abstract]	Song He	Institute of Theoretical Physics, Chinese Academy of Sciences
3	15:15-16:15	16:15-17:15	On 6-dimensional SCFTs and Little String Theories [View Abstract]	Kimyeong Lee	Korea Institute for Advanced Study
4	16:15-17:00	17:15-18:00	Non-invertible symmetries in two dimensions [View Abstract]	Chi-Ming Chang	Tsinghua University

LR7 (A3-4 1F) (UTC+8) 2023-07-21 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-21 Afternoon Math Lecture Room 7 (A3-4 1F) [Mathematics]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	Journey to the Center of the Earth [View Abstract]	Gunther Uhlmann	University of Washington & Hong Kong University of Science and Technology
2	14:15-15:00	15:15-16:00	Ancient solutions to the Mean Curvature Flow and applications [View Abstract]	Or Hershkovits	Hebrew University of Jerusalem
3	15:15-16:00	16:15-17:00	Geometry of Laplacian Eigenfunctions [View Abstract]	Nikolai Nadirashvili	Centre National de la Recherche Scientifique (CNRS)
4	16:15-17:00	17:15-18:00	Zeroes of harmonic functions and growth [View Abstract]	Aleksandr Logunov	University of Geneva & Massachusetts Institute of TechnologyPrinceton

LR8 (A3-4 3F) (UTC+8) 2023-07-21 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-21 Afternoon Math Lecture Room 8 (A3-4 3F) [Mathematics]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	Curvature of graphs and local discrepancy [View Abstract]	Paul Horn	University of Denver
2	15:00-16:00	16:00-17:00	Berry-Esseen bounds for design-based causal inference with possibly diverging treatment levels and varying group sizes [View Abstract]	Peng Ding	University of California Berkeley
3	16:15-17:00	17:15-18:00	An integrative framework for two-sample sparse inference [View Abstract]	Tony Cai	University of Pennsylvania

LR9 (A6 1F) (UTC+8) 2023-07-21 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-21 Morning Math LR9 (A6 1F) [Mathematics]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Partial heights and the geometric Bombieri--Lang Conjecture [View Abstract]	Junyi Xie	Beijing International Center for Mathematical Research, Peking University
2	09:15-10:15	10:15-11:15	Towards a geometric theory of cohomology functors : the case of degree 0 [View Abstract]	Laurent Lafforgue	HUAWEI TECHNOLOGIES FRANCE
3	10:30-11:30	11:30-12:30	The geometry of polynomial equations [View Abstract]	Christopher Hacon	University of Utah

LR12 (A7 3F) (UTC+8) 2023-07-21 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-21 Morning TCIS Lecture Room 12 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	The physical nature of digital images [View Abstract]	David Brady	University of Arizona
2	09:15-10:15	10:15-11:15	Continual Learning: Theory and Algorithms [View Abstract]	Bing Liu	University of Illinois Chicago
3	10:30-11:30	11:30-12:30	Digital Communications and Mathematics [View Abstract]	Xiang-Gen Xia	University of Delaware

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-21 Afternoon TCIS Lecture Room 12 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	High precision wireless positioning technology: Past, present and future [View Abstract]	Zheng Yao	Tsinghua University
2	14:00-14:45	15:00-15:45	Micro/Nano robotic swarms: Science and applications [View Abstract]	Junhui Law	University of Toronto

LR13 (A7 3F) (UTC+8) 2023-07-21 Local Time

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-21 Afternoon TCIS Lecture Room 13 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Next-Generation Holographic Displays Incorporating Optics and Machine Intelligence [View Abstract]	Yifan Peng	University of Hong Kong
2	14:00-14:45	15:00-15:45	Neural nano-optics for high-quality thin lens imaging [View Abstract]	Ethan Tseng	Princeton University
3	15:15-16:00	16:15-17:00	Recent progress on protein study by AI [View Abstract]	Jinbo Xu	MoleculeMind Inc. & Toyota Technological Institute at Chicago

2023-07-23 Sun**Chaoyang Kexie Blue Hall (UTC+8) 2023-07-23 Local Time**

16:00-16:45 (UTC+8) 17:00-17:45 Local Time | 07-23 Afternoon Basic Science Lectures [Basic Science Lecture]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	16:00-16:45	17:00-17:45	The unreasonable effectiveness of mathematics in large scale deep learning [View Abstract]	Greg Yang	xAI

2023-07-24 Mon**LR4 (A3-2 1F) (UTC+8) 2023-07-24 Local Time**

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-24 Morning Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Inflationary cosmology: Theory and observations [View Abstract]	Andrei Linde	Stanford University
2	09:15-10:15	10:15-11:15	Will LHC create baryons? [View Abstract]	Henry S Tye	Cornell University & Hong Kong University of Science & Technology
3	10:30-11:30	11:30-12:30	The Nature of Spacetime and Gravity in Hyperunified Field Theory [View Abstract]	Yue-Liang Wu	Institute of Theoretical Physics, Chinese Academy of Sciences

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-24 Afternoon Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	On high dimension operators, gauge/gravity correspondence and emergent spacetime [View Abstract]	Hai Lin	Shing-Tung Yau Center of Southeast University
2	14:00-14:45	15:00-15:45	From conformal collider to the LHC and beyond [View Abstract]	HuaXing Zhu	Peking University
3	15:15-16:00	16:15-17:00	Studies on cosmic ray origin and propagation with DAMPE and LHAASO [View Abstract]	Qiang Yuan	Purple Mountain Observatory, Chinese Academy of Sciences
4	16:15-17:00	17:15-18:00	Operator size distribution and its dynamical transition [View Abstract]	PENGFEI ZHANG	Fudan University

LR7 (A3-4 1F) (UTC+8) 2023-07-24 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-24 Morning Math Lecture Room 7 (A3-4 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Recent developments of augmented Hessian	Feida Jiang	Southeast University

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
			equations [View Abstract]		
2	09:15-10:15	10:15-11:15	Diff-ResNet: Integrating diffusion mechanism in residual neural network [View Abstract]	Zuoqiang Shi	Tsinghua University
3	10:30-11:30	11:30-12:30	Arbitrarily high order finite element methods for arbitrarily shaped domains with automatic mesh generation [View Abstract]	Zhiming Chen	Academy of Mathematics and Systems Science, Chinese Academy of Sciences

13:00-17:45 (UTC+8) 14:00-18:45 Local Time | 07-24 Afternoon Math Lecture Room 7 (A3-4 1F) [Mathematics]
[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	14:15-15:15	15:15-16:15	Data- and Model-Driven Approach for Computational Imaging [View Abstract]	Bin Dong	Peking University
2	15:30-16:30	16:30-17:30	Traceability of water pollution: An inversion scheme via dynamic CGO solutions [View Abstract]	Lingyun Qiu	Tsinghua University
3	16:45-17:45	17:45-18:45	Memory-efficient Anderson mixing methods and beyond [View Abstract]	Chenglong Bao	Tsinghua university

LR8 (A3-4 3F) (UTC+8) 2023-07-24 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-24 Morning Math Lecture Room 8 (A3-4 3F) [Mathematics]
[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Quantum invariants of colored 3-manifolds [View Abstract]	Zhengwei Liu	Tsinghua University & Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)
2	09:15-10:15	10:15-11:15	TBA-Wen-An Yong [View Abstract]	Wen-An Yong	Tsinghua University
3	10:30-11:30	11:30-12:30	Monodromy of a generalized Lamé equation of third order	Zhijie Chen	Tsinghua University

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
			and applications [View Abstract]		

13:00-17:45 (UTC+8) 14:00-18:45 Local Time | 07-24 Afternoon Math Lecture Room 8 (A3-4 3F) [Mathematics] [Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	Free interface problems and stabilizing effects of transversal magnetic fields [View Abstract]	Zhouping Xin	The Institute of Mathematical Sciences, The Chinese University of Hong Kong
2	14:15-15:15	15:15-16:15	Encoding orbits via best approximation [View Abstract]	Yitwah Cheung	Tsinghua University
3	15:30-16:30	16:30-17:30	Reverse mathematics and models of weak Koenig's lemma [View Abstract]	Kazuyuki Tanaka	Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)
4	16:45-17:45	17:45-18:45	A Quantum Algorithm for Analyzing Single-Cell Omics Data [View Abstract]	Ping Ma	University of Georgia

LR9 (A6 1F) (UTC+8) 2023-07-24 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-24 Morning Math Lecture Room 9 (A6 1F) [Mathematics] [Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Regularity of free boundary problems on metric spaces [View Abstract]	Xiping Zhu	Sun Yat-sen University
2	09:15-10:15	10:15-11:15	On varieties of general type with extremal invariants [View Abstract]	Jungkai Chen	National Taiwan University
3	10:30-11:30	11:30-12:30	Hyperbolic \mathbb{P}^n -sum and horospherical \mathbb{P}^n -Brunn-Minkowski theory in hyperbolic space [View Abstract]	Haizhong Li	Tsinghua University

13:00-17:45 (UTC+8) 14:00-18:45 Local Time | 07-24 Afternoon Math Lecture Room 9 (A6 1F) [Mathematics] [Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	On local regularity of space times [View Abstract]	Bing-Long Chen	Sun Yat-sen University
2	14:15-15:15	15:15-16:15	Symmetry of hypersurfaces with symmetric boundary [View Abstract]	Hui Ma	Tsinghua University
3	15:30-16:30	16:30-17:30	Converse L^2 theory for d -bar and positivity of direct image bundles [View Abstract]	Fusheng Deng	University of Chinese Academy of Sciences
4	16:45-17:45	17:45-18:45	The L_p Minkowski problem for the electrostatic capacity [View Abstract]	Ge Xiong	Tongji University

LR10 (A7 1F) (UTC+8) 2023-07-24 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-24 Morning Math Lecture Room 10 (A7 1F) [Mathematics]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Logical analysis of Ramsey type theorems [View Abstract]	Chi Tat Chong	National University of Singapore
2	09:15-10:15	10:15-11:15	Coupling Learning with Classical Computational Inversion [View Abstract]	Kui Ren	Columbia University
3	10:30-11:30	11:30-12:30	Positive mass theorem for asymptotically locally hyperbolic manifolds [View Abstract]	Lan-Hsuan Huang	University of Connecticut

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-24 Afternoon Math Lecture Room 10 (A7 1F) [Mathematics]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	The mathematics of general relativity [View Abstract]	Piotr Chrusciel	University of Vienna
2	14:15-15:00	15:15-16:00	The stability of charged black holes [View Abstract]	Elena Giorgi	Columbia University

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
			Abstract]		
3	15:15-16:00	16:15-17:00	The AdS instability conjecture in general relativity [View Abstract]	Georgios Moschidis	École Polytechnique Fédérale de Lausanne (EPFL)
4	16:15-17:00	17:15-18:00	Supertranslation invariance of angular momentum [View Abstract]	Po-Ning Chen	University of California, Riverside

LR12 (A7 3F) (UTC+8) 2023-07-24 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-24 Morning TCIS Lecture Room 12 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Reflecting on a 75-year Journey of Signal and Data Science [View Abstract]	Min Wu	University Maryland, College Park
2	09:15-10:15	10:15-11:15	Fundamental differences between natural and artificial intelligence [View Abstract]	Michael Zhang	The University of Texas at Dallas
3	10:30-11:30	11:30-12:30	Generative AI for graphs [View Abstract]	Michail Vazirgiannis	École polytechnique

LR13 (A7 3F) (UTC+8) 2023-07-24 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-24 Morning TCIS Lecture Room 13 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

2023-07-25 Tue

LR4 (A3-2 1F) (UTC+8) 2023-07-25 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-25 Morning Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	The open string pair production, its enhancement and more [View Abstract]	Jianxin Lu	University of Science and Technology of China
2	09:15-10:15	10:15-11:15	Exploring Particle Physics Frontiers with Perturbative Quantum Field Theories [View Abstract]	Lilin Yang	Zhejiang University
3	10:30-11:30	11:30-12:30	Did LIGO detect primordial black holes? [View Abstract]	Qing-Guo Huang	Institute of Theoretical Physics, Chinese Academy of Sciences

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-25 Afternoon Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	From the smallest to the largest: Understanding particles through the universe [View Abstract]	Yi Wang	Hong Kong University of Science and Technology
2	14:00-14:45	15:00-15:45	3D integrability in supersymmetric gauge theories and M-theory [View Abstract]	Junya Yagi	Yau Mathematical Sciences Center, Tsinghua University
3	15:15-16:00	16:15-17:00	Neutrino masses and new physics beyond the standard model [View Abstract]	Shun Zhou	Institute of High Energy Physics, Chinese Academy of Sciences
4	16:15-17:00	17:15-18:00	A quantum information perspective on entanglement islands [View Abstract]	Qiang Wen	Southeast University

LR7 (A3-4 1F) (UTC+8) 2023-07-25 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-25 Morning Math Lecture Room 7 (A3-4 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	On the global stability of large Fourier mode for 3-D Navier-Stokes equation [View Abstract]	Ping Zhang	Academy of Mathematics and Systems Science, Chinese Academy of Sciences
2	09:15-10:15	10:15-11:15	Hermitian manifolds: when Chern connection is Ambrose-Singer [View Abstract]	Fangyang Zheng	Chongqing Normal University
3	10:30-11:30	11:30-12:30	Med-Reader: A query-based multisource AI learner of medical publications [View Abstract]	Wenxuan Zhong	University of Georgia

13:00-17:45 (UTC+8) 14:00-18:45 Local Time | 07-25 Afternoon Math Lecture Room 7 (A3-4 1F) [Mathematics]
Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	TBA-Hongwei Xu [View Abstract]	Hongwei Xu	Zhejiang University
2	14:15-15:15	15:15-16:15	Spectral geometry of Kähler manifolds [View Abstract]	Hao Xu	Zhejiang University
3	15:30-16:30	16:30-17:30	New minimal Lagrangian surfaces in $\mathbb{C}P^2$ [View Abstract]	Sebastian Heller	Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)
4	16:45-17:45	17:45-18:45	TBA-Entao Zhao [View Abstract]	Entao Zhao	Zhejiang University

LR8 (A3-4 3F) (UTC+8) 2023-07-25 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-25 Morning Math Lecture Room 8 (A3-4 3F) [Mathematics]
Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Superintegrability and stratified symplectic spaces [View Abstract]	Nicolai Reshetikhin	Yau Mathematical Sciences Center, Tsinghua University & Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)
2	09:15-10:15	10:15-11:15	Variational bihamiltonian cohomologies and	Youjin Zhang	Tsinghua University

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
			integrable evolutionary PDEs [View Abstract]		
3	10:30-11:30	11:30-12:30	Automorphisms of the quantum cohomology of the Springer resolution and applications [View Abstract]	Changzheng Li	Sun Yat-sen University

13:00-17:45 (UTC+8) 14:00-18:45 Local Time | 07-25 Afternoon Math Lecture Room 8 (A3-4 3F) [Mathematics]
Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	Resurgent structure in topological strings [View Abstract]	Jie Gu	Southeast University
2	14:15-15:15	15:15-16:15	$N=2$ Schur indices and line defect correlators [View Abstract]	Tadashi Okazaki	Shing-Tung Yau Center of Southeast University
3	15:30-16:30	16:30-17:30	Global quantum many-body theory [View Abstract]	Liang Kong	Southern University of Science and Technology
4	16:45-17:45	17:45-18:45	Magnetic quivers for theories with 8 supercharges [View Abstract]	Sperling Marcus	Southeast University

LR12 (A7 3F) (UTC+8) 2023-07-25 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-25 Morning TCIS Lecture Room 12 (A7 3F) [Theoretical Computer and Information Sciences]

Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	A Novel High-fidelity Image Compression Framework Based on Optimal Transport Mapping [View Abstract]	Min Zhang	Zhejiang University
2	09:15-10:15	10:15-11:15	ChatGLM: Run your own ChatGPT on a laptop [View Abstract]	Jie Tang	Tsinghua University
3	10:30-11:30	11:30-12:30	Facets of entropy [View Abstract]	Raymond Yeung	The Chinese University of Hong Kong

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-25 Afternoon TCIS Lecture Room 12 (A7 3F) [Theoretical Computer and Information Sciences]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Quantum artificial intelligence [View Abstract]	Dongling Deng	Tsinghua University
2	14:00-14:45	15:00-15:45	An Integrated Mathematical Framework for Opinion Dynamics and Its Applications [View Abstract]	Xiaoming Zhang	BIMSA

2023-07-26 Wed

LR4 (A3-2 1F) (UTC+8) 2023-07-26 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-26 Morning Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	TBA-Wei Wang [View Abstract]	Wei Wang	Shanghai Jiaotong University
2	09:15-10:00	10:15-11:00	The $T\mathcal{T}/\bar{T}\mathcal{T}$ correspondence [View Abstract]	Wei Song	Yau Mathematical Sciences Center, Tsinghua University
3	10:15-11:00	11:15-12:00	RG fixed point tensors and factorisation of 2d CFT [View Abstract]	Ling Yan Hung	Yau Mathematical Sciences Center, Tsinghua University

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-26 Afternoon Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Searching for physics beyond the Standard Model with astrophysical and cosmological	Haipeng An	Tsinghua University

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
			phenomena [View Abstract]		
2	14:00-14:45	15:00-15:45	Probing new physics through gravitational wave observations [View Abstract]	Jing Ren	Institute of High Energy Physics, Chinese Academy of Sciences
3	15:15-16:00	16:15-17:00	Integrable boundary states: from quench dynamics to AdS/CFT [View Abstract]	Yunfeng Jiang	Shing-Tung Yau Center of Southeast University
4	16:15-17:00	17:15-18:00	Geometric engineering of QFTs and generalized symmetries [View Abstract]	Yinan Wang	Peking University

LR7 (A3-4 1F) (UTC+8) 2023-07-26 Local Time

08:00-12:00 (UTC+8) 09:00-13:00 Local Time | 07-26 Morning Math Lecture Room 7 (A3-4 1F) [Mathematics]
[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Hypergeometric systems on reductive groups [View Abstract]	Lei Fu	Yau Mathematical Sciences Center, Tsinghua University
2	09:15-10:15	10:15-11:15	Cohomological rank functions and surfaces with $p=q=2$ [View Abstract]	Zhi Jiang	Shanghai Center for Mathematical Sciences, Fudan University

13:00-17:45 (UTC+8) 14:00-18:45 Local Time | 07-26 Afternoon Math Lecture Room 7 (A3-4 1F) [Mathematics]
[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	Rank-2 motivic local systems on the complex projective line removing 4-points. [View Abstract]	Kang Zuo	Wuhan University
2	14:15-15:15	15:15-16:15	Commensurabilities among lattices in $\mathrm{PU}(1,n)$ [View Abstract]	Chenglong Yu	Yau Mathematical Sciences Center, Tsinghua University
3	15:30-16:30	16:30-17:30	Finite subgroups of derived automorphisms of generic $K3$ surfaces [View Abstract]	Yu-Wei Fan	Tsinghua University

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
4	16:45-17:45	17:45-18:45	Hodge-Riemann relations for Schur classes [View Abstract]	Weizhe Zheng	Academy of Mathematics and Systems Science, Chinese Academy of Sciences

LR8 (A3-4 3F) (UTC+8) 2023-07-26 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-26 Morning Math Lecture Room 8 (A3-4 3F) [Mathematics] [Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Gromov-Witten invariants of Calabi-Yau quintics via mixed-spring-P-field theory [View Abstract]	Weiping Li	Hong Kong University of Science and Technology
2	09:15-10:15	10:15-11:15	From probability theory to noncompact Calabi-Yau 3-folds [View Abstract]	Jian Zhou	Tsinghua University
3	10:30-11:30	11:30-12:30	Regularized integrals on configuration spaces of Riemann surfaces and cohomological pairings [View Abstract]	Jie Zhou	Tsinghua University

13:00-17:45 (UTC+8) 14:00-18:45 Local Time | 07-26 Afternoon Math Lecture Room 8 (A3-4 3F) [Mathematics] [Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	Rozansky-Witten theory and KZ-equations [View Abstract]	Babak Haghighat	Tsinghua University
2	14:15-15:15	15:15-16:15	Towards non-perturbative QFT's and strings [View Abstract]	Sen Hu	University of Science and Technology of China
3	15:30-16:30	16:30-17:30	Physics and mathematics of higher genus Gromov-Witten invariants of the quintic threefolds [View Abstract]	Shuai Guo	Peking University
4	16:45-17:45	17:45-18:45	Quantum current [View Abstract]	Tian Lan	The Chinese University of Hong Kong

2023-07-27 Thur

LR4 (A3-2 1F) (UTC+8) 2023-07-27 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-27 Morning Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	TBA-Qikun Xue [View Abstract]	Qikun Xue	Southern University of Science and Technology
2	09:15-10:15	10:15-11:15	Theory for High Tc Superconducting Cuprates [View Abstract]	Fuchun Zhang	University of Chinese Academy of Sciences
3	10:30-11:30	11:30-12:30	Spin superconductor and electric dipole superconductor [View Abstract]	Xin-Cheng Xie	Peking University, Fudan University

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-27 Afternoon Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Theory of a strange metal at the breakdown of a heavy Fermi liquid [View Abstract]	Erik Aldape	University of California, Berkeley
2	14:00-14:45	15:00-15:45	Global phase diagram of twisted Bilayer graphene [View Abstract]	Glenn Wagner	University of Zürich
3	15:15-16:00	16:15-17:00	The rise of intrinsic magnetic topological insulators [View Abstract]	Mikhail Otrokov	IkerbasqueMaterials Physics Center (MPC)
4	16:15-17:00	17:15-18:00	Non-Hermitian parent hamiltonian and composite quantum phases [View Abstract]	Shuo Yang	Tsinghua University

LR7 (A3-4 1F) (UTC+8) 2023-07-27 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-27 Morning Math Lecture Room 7 (A3-4 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Infinite dimensional representations of algebraic groups with Frobenius maps [View Abstract]	Nanhua Xi	Academy of Mathematics and Systems Science, Chinese Academy of Sciences
2	09:15-10:15	10:15-11:15	Gravitational instantons and special geometry [View Abstract]	Lars Andersson	Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)
3	10:30-11:30	11:30-12:30	On the instability of naked singularities in general relativity [View Abstract]	Junbin Li	Sun Yat-sen University

13:00-17:45 (UTC+8) 14:00-18:45 Local Time | 07-27 Afternoon Math Lecture Room 7 (A3-4 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	Spectral rigidity of complex projective spaces [View Abstract]	Kefeng Liu	University of California, Los Angeles
2	14:15-15:15	15:15-16:15	On Kähler Ricci shrinker surfaces [View Abstract]	Bing Wang	University of Science and Technology of China
3	15:30-16:30	16:30-17:30	Recent progress on G_2 flows [View Abstract]	Yi Li	Southeast University
4	16:45-17:45	17:45-18:45	The area of Lawson surfaces and multiple zeta values [View Abstract]	Lynn Heller	Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)

LR8 (A3-4 3F) (UTC+8) 2023-07-27 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-27 Morning Math Lecture Room 8 (A3-4 3F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Profinite properties of finite-volume hyperbolic 3-manifolds [View Abstract]	Yi Liu	Peking University
2	09:15-10:15	10:15-11:15	Redefining Kontsevich's characteristic classes using formal smooth	Jianfeng Lin	Yau Mathematical Sciences Center, Tsinghua University

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
			structures [View Abstract]		
3	10:30-11:30	11:30-12:30	Topology and complex network [View Abstract]	Jie Wu	Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)

13:00-17:45 (UTC+8) 14:00-18:45 Local Time | 07-27 Afternoon Math Lecture Room 8 (A3-4 3F) [Mathematics] Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	Modularity for W -algebras and affine Springer fiber [View Abstract]	Peng Shan	Tsinghua University
2	14:15-15:15	15:15-16:15	Recent progress on p -adic Jacquet-Langlands correspondence for $(2, \mathbb{Q}_p)$ [View Abstract]	Yongquan Hu	Academy of Mathematics and Systems Science & Morningside Center of Mathematics, Chinese Academy of Sciences
3	15:30-16:30	16:30-17:30	Robba site and Robba cohomology [View Abstract]	Koji Shimizu	Yau Mathematical Sciences Center, Tsinghua University
4	16:45-17:45	17:45-18:45	Splitting models and Galois representations [View Abstract]	Xu Shen	Academy of Mathematics and Systems Science & Morningside Center of Mathematics, Chinese Academy of Sciences

LR12 (A7 3F) (UTC+8) 2023-07-27 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-27 Morning TCIS Lecture Room 12 (A7 3F) [Theoretical Computer and Information Sciences] Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	09:15-10:15	10:15-11:15	Some Basic Problems in Systems and Control [View Abstract]	Lei Guo	Academy of Mathematics and Systems Science, Chinese Academy of Sciences

2023-07-28 Fri

LR4 (A3-2 1F) (UTC+8) 2023-07-28 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-28 Morning Physics Lecture Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	TBA-Philip Candelas [View Abstract]	Philip Candelas	University of Oxford
2	09:15-10:15	10:15-11:15	From linear algebra to Feynman integrals [View Abstract]	Yanqing Ma	Peking University
3	10:30-11:30	11:30-12:30	TBA-Hong Yao [View Abstract]	Hong Yao	Tsinghua University

13:00-17:00 (UTC+8) 14:00-18:00 Local Time | 07-28 Afternoon Physics Room 4 (A3-2 1F) [Theoretical Physics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-13:45	14:00-14:45	Amoeba formulation of non-Hermitian band theory [View Abstract]	Zhong Wang	Tsinghua University
2	14:00-14:45	15:00-15:45	Analytical methods for QFT amplitudes in dS spacetime [View Abstract]	Zhong-Zhi Xianyu	Tsinghua University
3	15:15-16:00	16:15-17:00	TBA-Hossein Yavartanoo [View Abstract]	Hossein Yavartanoo	Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)

LR7 (A3-4 1F) (UTC+8) 2023-07-28 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-28 Morning Math Lecture Room 7 (A3-4 1F) [Mathematics]

[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Normalized discrete Ricci flow and community detection [View Abstract]	Yong Lin	Tsinghua University
2	09:15-10:15	10:15-11:15	Cheeger type constants and spectral theory of signed graphs [View Abstract]	Shiping Liu	University of Science and Technology

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
3	10:30-11:30	11:30-12:30	Orientations of graphs with forbidden out-degree lists [View Abstract]	Hehui Wu	Fudan University

13:00-17:45 (UTC+8) 14:00-18:45 Local Time | 07-28 Afternoon Math Lecture Room 7 (A3-4 1F) [Mathematics]
Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	Extremal graph theory and conjectures of Erdos-Simonovits [View Abstract]	Jie Ma	University of Science and Technology of China
2	14:15-15:15	15:15-16:15	Spectral extremal graphs for disjoint cliques [View Abstract]	Liyang Kang	Shanghai University
3	15:30-16:30	16:30-17:30	Orientations of graphs avoiding non-consecutive integers on out-degrees [View Abstract]	Hongliang Lu	Xi'an Jiaotong University
4	16:45-17:45	17:45-18:45	Hypergraphs with irrational Turán density and many extremal configurations [View Abstract]	Jianfeng Hou	Fuzhou University

LR8 (A3-4 3F) (UTC+8) 2023-07-28 Local Time

08:00-11:30 (UTC+8) 09:00-12:30 Local Time | 07-28 Morning Math Lecture Room 8 (A3-4 3F) [Mathematics]
Watch live

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	08:00-09:00	09:00-10:00	Nonlinear Partial Differential Equations of Mixed Type: From the Riemann Problem to the Isometric Embedding Problem [View Abstract]	Gui-Qiang Chen	University of Oxford
2	09:15-10:15	10:15-11:15	Connection probabilities for Ising model and their relation to Dyson's circular ensemble [View Abstract]	Hao Wu	Tsinghua University

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
3	10:30-11:30	11:30-12:30	Asynchronous opinion Dynamics [View Abstract]	Yuval Peres	Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)

13:00-17:45 (UTC+8) 14:00-18:45 Local Time | 07-28 Afternoon Math Lecture Room 8 (A3-4 3F) [Mathematics]
[Watch live](#)

NO.	Beijing Time (UTC+8)	Local Time	Talk Title	Speaker	Affiliation
1	13:00-14:00	14:00-15:00	Interface motion from non-gradient Glauber-Kawasaki dynamics [View Abstract]	Tadahisa Funaki	Yanqi Lake Beijing Institute of Mathematical Sciences and Applications
2	14:15-15:15	15:15-16:15	The hypernetwork model of complex systems [View Abstract]	Rongling Wu	Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)
3	15:30-16:30	16:30-17:30	Wave motion in topological materials [View Abstract]	Yi Zhu	Tsinghua University
4	16:45-17:45	17:45-18:45	Mediation analysis with the mediator and outcome missing not at random [View Abstract]	Fan Yang	Tsinghua University

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