

Index Theory and Complex Geometry: Conference on Index Theory and Related Topics (23–27 August 2021)

ORGANIZING COMMITTEE

Tien Cuong Dinh

National University of Singapore, Singapore

Fei Han

National University of Singapore, Singapore

Xiaonan Ma

Université Paris Diderot - Paris 7, France

Mathai Varghese

University of Adelaide, Australia

*[Registration](#) is required for this program.

Venue

Virtual: The details and link will be sent to you before the program commences after registration has been processed.



For more information: [Click here](#)

Index Theory and Complex Geometry

Conference on Index Theory and Related Topics

(23–27 August 2021)

All times are indicated in GMT+0.

For more time zones conversion: [Click Here](#)

GMT Time Reference								
GMT+0	GMT-4	GMT+1	GMT+2	GMT+3	GMT+5.30	GMT+7	GMT+8	GMT+9
Greenwich Mean Time	Canada New York	UK	Germany France Poland Norway	Moscow	India	Vietnam	Singapore China Taiwan Hongkong	Japan Korea
0100	2100	0200	0300	0400	0630	0800	0900	1000
0800	0400	0900	1000	1100	1330	1500	1600	1700
0900	0500	1000	1100	1200	1430	1600	1700	1800
1200	0800	1300	1400	1500	1730	1900	2000	2100
1300	0900	1400	1500	1600	1830	2000	2100	2200
1400	1000	1500	1600	1700	1930	2100	2200	2300

Monday, 23 August 2021		
Time (GMT +0)	Title	Speaker
Session Chair: Xiaonan Ma, Université Paris Diderot - Paris 7, France		
0800–0900	<i>Distinguished Visitor Lecture Series</i> Coherent sheaves, Chern character, and RRG	Jean-Michel Bismut Université Paris-Saclay, France
0900–1000	The fried conjecture for admissible twists	Shu Shen Sorbonne Université, France
1000–1300	Break	
Session Chair: Siye Wu, National Tsing Hua University, Taiwan		
1300–1400	Index theory on generalised hyperbolic cusps	Peter Hochs Radboud University, Netherlands
1400–1500	Quantitative K-theory and decay of scalar curvature	Guoliang Yu Texas A&M University, USA

Tuesday, 24 August 2021		
Time (GMT +0)	Title	Speaker
Session Chair: Fei Han, National University of Singapore, Singapore		
0800–0900	Anomaly and symmetry breaking in quantisation	Siye Wu National Tsinghua University, Taiwan
0900–1000	A delocalized Riemann-Roch theorem for proper actions	Hang Wang East China Normal University, China
1000–1300	Break	
Session Chair: Guoliang Yu, Texas A&M University, USA		
1300–1400	Higher orbital integrals and cyclic cohomology	Xiang Tang Washington University in St. Louis, USA
1400–1500	Higher orbital integrals and APS index theorem	Yanli Song Washington University in St. Louis, USA
Wednesday, 25 August 2021		
Time (GMT +0)	Title	Speaker
Session Chair: Hang Wang, East China Normal University, China		
0800–0900	Bbirational invariance of the BCOV invariant	Yeping Zhang Korea Institute for Advanced Study, Korea
0900–1000	Higher A-hat genera for proper actions and positive scalar curvature	Hao Guo Texas A&M University, USA
1000–1300	Break	
Session Chair: Xiang Tang, Washington University in St. Louis, USA		
1300–1400	On Perrot's index cocycles	Nigel Higson The Pennsylvania State University, USA
1400–1500	Index theory and Gromov's conjectures on positive scalar curvature	Zhizhang Xie Texas A&M University, USA

Thursday, 26 August 2021		
Time (GMT +0)	Title	Speaker
Session Chair: Pedram Hekmati, The University of Auckland, New Zealand		
0100–0200	Analytic torsion for Witten deformation on noncompact manifolds	Xianzhe Dai UC Santa Barbara, USA
0200–0800	Break	
0800–0900	Low energy resolvent on manifolds with fibered boundary	Boris Vertman University of Oldenburg, Germany
0900–1300	Break	
Session Chair: Mathai Varghese, University of Adelaide, Australia		
1300–1400	Dirac-type operators on stratified spaces	Pierre Albin University of Illinois Urbana-Champaign, USA
1400–1500	<i>Distinguished Visitor Lecture Series</i> The Dirac-Ramond operator	Richard Melrose Massachusetts Institute of Technology, USA
Friday, 27 August 2021		
Time (GMT +0)	Title	Speaker
Session Chair: Yeping Zhang, Korea Institute for Advanced Study, Korea		
0800–0900	Twisted torsion for finite group actions	Pedram Hekmati The University of Auckland, New Zealand
0900–1000	Eta invariant and localization	Bo Liu East China Normal University, China
1000–1200	Break	
Session Chair: Shu Shen, Sorbonne Université, France		
1200–1300	Degeneration of Riemann surfaces and small eigenvalues of Laplacian	Ken-Ichi Yoshikawa Kyoto University, Japan
1300–1400	A comparison between the Bismut-Lott torsion and the Igusa-Klein torsion	Martin Puchol Université Paris-Saclay, France

For abstracts: [Click here](#)