



算子代数研究中心

Research Center for Operator Algebras

Special Week on Operator Algebras

August 10th -August 14th, 2020



Sponsor: East China Normal University

Co-sponsor: Fudan University

SHANGHAI·CHINA

Calendar

Remark: The time beneath the speaker's name represents the speaker's local time when he/she should start the talk (only for reference). Please double check.

Beijing time	Monday 8.10	Tuesday 8.11	Wednesday 8.12	Thursday 8.13	Friday 8.14
Chair (AM/PM)	Huaxin Lin/Qin Wang	Huaxin Lin/Hang Wang	Yi-jun Yao/Xiaochun Fang	Jianchao Wu/ Chi-Keung Ng	Jiawen Zhang/Qin Wang
9:00-10:00	George Elliott 8.9 (Sun.) 21:00-22:00	Schafhauser 8.10 19:00-20:00	Guihua Gong 8.11 21:00-22:00	David Kerr 8.12 20:00-21:00	Kun Wang 8.13 21:00-22:00
10:30-11:30	Chris Phillips 8.9 (Sun.) 19:30-20:30	Zhuang Niu 8.10 20:30-21:30	Jianchao Wu 8.11 21:30-22:30	Xin Ma 8.12 22:30-23:30	Hui Li
14:00-15:00	Nasser Golestani 8.10 10:30-11:30	Masaki Izumi 8.11 15:00-16:00	Hang Wang	Jiawen Zhang	Chi-Keung Ng 8.14 14:00-15:00
15:30-16:30	Gilles Pisier 8.10 9:30-10:30	Karen Strung 8.11 9:30-10:30	Xin Li 8.12 8:30-9:30	Wilhelm Winter 8.13 9:30-10:30	Peter Hochs 8.14 9:30-10:30
16:35-17:35	Kristin Courtney 8.10 10:35-11:35	Ali Asadivasfi 8.11 13:05-14:05			

Organizers:

Huaxin Lin (University of Oregon)
Qin Wang (East China Normal University)
Jianchao Wu (Texas A&M University)

Speakers:

M.Ali Asadi-Vasfi (University of Tehran)
Kristin Courtney (University of Muenster)
George A. Elliott (University of Toronto)
Nasser Golestani (University of Tehran)
Guihua Gong (University of Puerto Rico)
Peter Hochs (Radboud University in Nijmegen)
Masaki Izumi (Kyoto University)
David Kerr (Texas A&M University)
Hui Li (North China Electric Power University)
Xin Li (University of Glasgow)
Xin Ma (SUNY Buffalo)
Chi-Keung Ng (Nankai University)
Zhuang Niu (University of Wyoming)
N. Christopher Phillips (University of Oregon)
Gilles Pisier (Texas A&M University)
Christopher Schafhauser (University of Nebraska-Lincoln)
Karen Strung (Czech Academy of Sciences)
Hang Wang (East China Normal University)
Kun Wang (University of Puerto Rico)
Wilhelm Winter (University of Muenster)
Jianchao Wu (Texas A&M University)
Jiawen Zhang (University of Southampton)

Schedule

Location: online via Zoom.

Meeting room for all lectures:

630 1015 4411

Discussion room:

650 7878 7481 (Passcode: SWOA2020)

656 7988 0885 (Passcode: SWOA2020)

965 5682 5775 (Passcode: SWOA2020)

The time for discussion at the main meeting room will be limited. Speakers and participants wishing to have longer discussion may use the discussion rooms if needed.

Schedule of the talks (Beijing time):

Monday, 10 August	
<i>Chair: Huaxin Lin</i>	
9:00–10:00	George A. Elliott: <i>Review: the classification problem for amenable C^*-algebras</i>
10:30–11:30	N. Christopher Phillips: <i>Lower bounds on the radius of comparison of crossed products by minimal homeomorphisms</i>
<i>Chair: Qin Wang</i>	
14:00–15:00	Nasser Golestani: <i>The topological rank of Cantor minimal systems</i>
15:30–16:30	Gilles Pisier: <i>Nuclear pairs</i>
16:35–17:35	Kristin Courtney: <i>C^*-structure on images of completely positive order zero maps</i>

Tuesday, 11 August	
<i>Chair: Huaxin Lin</i>	
9:00–10:00	Christopher Schafhauser: <i>Classifying nuclear $*$-homomorphisms</i>
10:30–11:30	Zhuang Niu: <i>Structure of transformation group C^*-algebras</i>
<i>Chair: Hang Wang</i>	
14:00–15:00	Masaki Izumi: <i>The classification of Poly-Z group actions on the Kirchberg algebras</i>
15:30–16:30	Karen Strung: <i>TBA</i>
16:35–17:35	M. Ali Asadi-Vasfi: <i>The Cuntz semigroup of the crossed product by a tracially strictly approximately inner action</i>

Wednesday, 12 August	
<i>Chair: Yi-jun Yao</i>	
9:00–10:00	Guihua Gong: <i>Classification of simple separable C^*-algebras of finite nuclear dimension</i>
10:30–11:30	Jianchao Wu: <i>Dynamical analogues of Cuntz semigroups, strict comparison and Z-stability</i>
<i>Chair: Xiaochun Fang</i>	
14:00–15:00	Hang Wang: <i>Index theory for elliptic operators invertible at infinity</i>
15:30–16:30	Xin Li: <i>Constructing Cartan subalgebras in all classifiable C^*-algebras</i>

Thursday, 13 August	
<i>Chair: Jianchao Wu</i>	
9:00–10:00	David Kerr: <i>C^*-simple groups with property Gamma</i>
10:30–11:30	Xin Ma: <i>Fiberwise amenability and almost elementariness of étale groupoids</i>
<i>Chair: Chi-Keung Ng</i>	
14:00–15:00	Jiawen Zhang: <i>Asymptotic expanders and quasi-locality</i>
15:30–16:30	Wilhelm Winter: <i>Completely positive approximations revisited</i>

Friday, 14 August	
<i>Chair: Jiawen Zhang</i>	
9:00–10:00	Kun Wang: <i>Classification of C^*-algebras and the Invariants</i>
10:30–11:30	Hui Li: <i>Remarks On the K-theory of C^*-Algebras of Products of Odometers</i>
<i>Chair: Qin Wang</i>	
14:00–15:00	Chi-Keung Ng: <i>Quan-set theory and non-commutative Gelfand theorem</i>
15:30–16:30	Peter Hochs: <i>An equivariant Callias index theorem for proper actions</i>

Abstracts

M. Ali Asadi-Vasfi (University of Tehran)

Title: *The Cuntz semigroup of the crossed product by a tracially strictly approximately inner action*

Abstract: The Cuntz semigroup is a key ingredient in the Elliott program for the classification of C^* -algebras. It is generally large and complicated. Among simple nuclear C^* -algebras, the classifiable ones are those whose Cuntz semigroups are easily accessible. With the near completion of the Elliott program, nonclassifiable C^* -algebras attract more attention and the Cuntz semigroup is the main available invariant.

In this talk, we define strict approximate innerness for an action of a finite group on a unital C^* -algebra and its tracial analog, tracial strict approximate innerness. Strict approximate innerness is weaker than approximate representability.

We then show that if G is a finite group, A is an infinite-dimensional simple unital stably finite C^* -algebra, and $\alpha: G \rightarrow \text{Aut}(A)$ is a tracially strictly approximately inner action, then the inclusion of A in $C^*(G, A, \alpha)$ induces an isomorphism from the purely positive part of the Cuntz semigroup $Cu(A)$ to its image in $Cu(G, A, \alpha)$. If α is strictly approximately inner, then in fact $Cu(A) \rightarrow Cu(G, A, \alpha)$ is an ordered semigroup isomorphism onto its range.

We further show that if α is tracially strictly approximately inner, then the radii of comparison of A and the crossed product are related by

$$rc(A) \leq rc(C^*(G, A, \alpha)).$$

Finally, for every finite group G and for every $\eta \in (0, \frac{1}{\text{card}(G)})$, we construct a simple separable unital AH algebra A with stable rank one and an action $\alpha: G \rightarrow \text{Aut}(A)$ such that:

- (1) α is pointwise outer and strictly approximately inner.
- (2) $rc(A) = rc(C^*(G, A, \alpha)) = \eta$.

This talk is based on some parts of the speaker's Ph.D. dissertation under the supervision of N. Christopher Phillips.

Kristin Courtney (University of Muenster)

Title: *C^* -structure on images of completely positive order zero maps*

Abstract: A completely positive map is called order zero when it preserves orthogonality. Such maps enjoy a rich structure, which has made them a key component of completely positive approximations of nuclear C^* -algebras. Motivated by generalized inductive limits arising from such cp approximations, we consider the structure of the image of a cp order zero map. When the domain is unital, we can define multiplication and a corresponding pre- C^* -norm on the image. Generalizing this idea, we show that one can always build a pre- C^* -structure on a self-adjoint subspace of a C^* -algebra satisfying certain nice criteria. Moreover these criteria characterize when a self-adjoint subspace of a C^* -algebra is the image of a unital C^* -algebra under a cp order zero map.

This is joint work with Wilhelm Winter.

George A. Elliott (University of Toronto)

Title: *Review: the classification problem for amenable C^* -algebras*

Abstract: Thirty years ago—thirty years after Glimm’s classification of uniformly hyperfinite (UHF) C^* -algebras—and fifty years after Gelfand and Naimark classified commutative C^* -algebras by their spectrum (an invariant that is also important in the non-commutative case), the prospect of classifying all (separable) amenable (= nuclear) C^* -algebras seemed perhaps vaguely feasible—but not to very many people. There was evidence to point at, but only scattered here and there. A leap of faith was necessary!

Now, after thousands of pages of painstaking calculations, coupled with numerous conceptual advances, the restricted but robust Toms-Winter class of especially well-behaved simple separable amenable C^* -algebras (namely, assumed to be Jiang-Su stable—not automatic but with examples arising everywhere—and to satisfy the Universal Coefficient Theorem (UCT)—perhaps automatic!) has been classified by means of a simple invariant (K-theoretic in nature), the possible values of which are also very simple.

(The classification is perhaps reminiscent of that of finite simple groups, although that is not formulated in terms of an invariant. One hopes that the C^* -algebra classification could also be fruitful.)

Given the additional information contained in more subtle invariants, such as the Cuntz semigroup, it does not seem unreasonable to continue to envisage the original goal.

Nasser Golestani (University of Tehran)

Title: *The topological rank of Cantor minimal systems*

Abstract: The topological rank of a Cantor minimal system is the width of the thinnest

ordered Bratteli diagram realizing that system. The finiteness of this quantity gives nice properties to the system. For instance, a result of Downarowicz and Maass states that a finite rank Cantor minimal system is conjugate to a subshift or an odometer. We review some preliminaries to ordered Bratteli diagrams and their associated Cantor minimal systems, and then we prove that every minimal Cantor factor of a finite rank system is of finite rank. We discuss a possible relation between the topological rank of a system and C^* -algebraic ranks of the associated crossed product. The talk is based on a joint work with Maryam Hosseini.

Guihua Gong (University of Puerto Rico)

Title: *Classification of simple separable C^* -algebras of finite nuclear dimension*

Abstract: I will give a brief survey on the classification of C^* -algebras and present some results obtained jointly with Elliott, Lin and Niu.

Peter Hochs (Radboud University Nijmegen)

Title: *An equivariant Callias index theorem for proper actions*

Abstract: An elliptic differential operator on a noncompact manifold is Fredholm if it is invertible at infinity in a suitable sense. An example of such an operator is a Callias operator: a Dirac operator plus an order zero term that makes the operator invertible at infinity. Indices of Callias operators were studied by various authors, including Anghel, Bunke, Callias and Kucerovsky. They obtained index theorems for these operators, and applied them to questions about positive scalar curvature. Hao Guo developed equivariant index theory of Callias operators for proper group actions. We re-interpret his index in terms of equivariant Roe algebras, and obtain an index theorem in this equivariant setting.

This is joint work with Hao Guo and Mathai Varghese.

Masaki Izumi (Kyoto University)

Title: *The classification of Poly- Z group actions on the Kirchberg algebras*

Abstract: I'll give an account of our recent classification result of outer actions of poly- Z groups G on Kirchberg algebras A in terms of the associated classifying maps. Roughly speaking such actions are completely classified by the associated continuous fields of A over the classifying space BG (caution: this is not a correct statement in the unital case). In particular, we determined the number of cocycle conjugacy classes of outer actions of Z^m on the Cuntz algebras.

This is joint work with Hiroki Matui.

David Kerr (Texas A&M University)

Title: *C^* -simple groups with property Gamma*

Abstract: I will explain how one can use the theories of topological full groups and dynamical entropy to construct large classes of simple finitely generated groups which are C^* -simple and have property Gamma. This is joint work with Robin Tucker-Drob.

Hui Li (North China Electric Power University)

Title: *Remarks On the K-theory of C^* -Algebras of Products of Odometers*

Abstract: We formulate a conjecture on the K-theory of the self-similar k-graph C^* -algebra of a standard product of odometers and discuss some fundamental properties concerning this C^* -algebra.

Xin Li (University of Glasgow)

Title: *Constructing Cartan subalgebras in all classifiable C^* -algebras*

Abstract: My talk will be about a construction of Cartan subalgebras in classifiable stably finite C^* -algebras, based on joint work with Selcuk Barlak. I will discuss general existence results as well as more refined versions concerning existence of Cartan subalgebras whose spectra are of a particular form. I will also present non-uniqueness results.

Xin Ma (SUNY Buffalo)

Title: *Fiberwise amenability and almost elementariness of étale groupoids*

Abstract: In this talk, I will discuss two new properties for locally compact Hausdorff étale groupoids. One is from coarse geometric view called fiberwise amenability as a new generalization of amenability for discrete groups. Another one from dynamical view is called almost elementariness, which is a generalization of the concept almost finiteness introduced by Matui and refined by Kerr. I will show our almost elementariness implying tracial Z -stability of reduced groupoid C^* -algebras if the groupoid is minimal and separable. As an application, Matui's almost finiteness in the groupoid setting also implies Z -stability of reduced groupoid C^* -algebras when the groupoid is minimal, separable and topological amenable. This is open in general before. I will also present more applications if time permits. This is based on a joint work with Jianchao Wu.

Chi-Keung Ng (Nankai University)

Title: *Quan-set theory and non-commutative Gelfand theorem*

Abstract: A *quan-set* is a set X equipped with a relation \neq_q , called a q -distinctness relation,

satisfying the following requirement: if $x \not\equiv_q y$, then $y \not\equiv_q x$ as well as $x \neq y$. We call $S \subseteq X$ a quan-subset if $(S^c)^c = S$, where $S^c := \{x \in X : x \not\equiv_q y, \text{ for each } y \in S\}$. The collection of all quan-subsets forms a complete ortholattice. We will show that every complete ortholattice indeed comes from a quan-set. Moreover, there is a bijective correspondence between complete atomistic ortholattices (respectively, complete atomistic orthomodular lattices) and atomic quan-sets (respectively, atomic hereditary quan-sets).

On a quan-set, we introduce the notion of quan-topology, which is a collection of *quan-closed subsets* satisfying certain properties similar to those of ordinary topologies. A *quan-homeomorphism* is a bijection preserving both the q-distinctness relations and quan-closed subsets.

Let B be a C^* -algebra, and \mathfrak{P}^B be the set of all pure states of B . We equip \mathfrak{P}^B with the q-distinctness relation \neq_o induced by zero transition probability. We also equip \mathfrak{P}^B with a Jacobson type quan-topology; i.e., the collection $\{\text{hull}(L) : L \text{ is a closed left ideal of } B\}$, where

$$\text{hull}(L) := \{\omega \in \mathfrak{P}^B : L \subseteq L_\omega\} \quad \text{and} \quad L_\omega := \{x \in B : \omega(x^*x) = 0\}.$$

Let A and B be C^* -algebras. We obtain the following non-commutative Gelfand theorem: if \mathbb{M}_2 is not a quotient C^* -algebra of A and $\Psi : \mathfrak{P}^A \rightarrow \mathfrak{P}^B$ is a quan-homeomorphism, then there is a Jordan $*$ -isomorphism $\Theta : B \rightarrow A$ with $\Psi = \Theta^*|_{\mathfrak{P}^A}$. If A is a primitive C^* -algebra (could be \mathbb{M}_2) and there is a quan-homeomorphism from \mathfrak{P}^A to \mathfrak{P}^B , then A and B are either $*$ -isomorphic or $*$ -anti-isomorphic.

[It is a joint work with Chun Ding]

Zhuang Niu (University of Wyoming)

Title: *Structure of transformation group C^* -algebras*

Abstract: Consider a free and minimal action of Z^d on a compact Hausdorff space. I'll talk about comparison radius, classifiability, and the stable rank of the corresponding crossed-product C^* -algebra. Part of the talk is based on a joint work with Chunguang Li.

N. Christopher Phillips (University of Oregon)

Title: *Lower bounds on the radius of comparison of crossed products by minimal homeomorphisms*

Abstract: We introduce “mean cohomological independence dimension” for actions of countable amenable groups on compact metric spaces, as a variant of mean dimension, and use it to obtain lower bounds for the radius of comparison of the associated crossed product C^* -algebras. We hope this version of mean dimension is more computable in some cases.

Gilles Pisier (Texas A&M University)

Title: *Nuclear pairs*

Abstract: We describe the construction of the first example of a non nuclear C^* -algebra A with WEP and LLP. This gives a new example of non-nuclear A for which there is a unique C^* -norm on $A \otimes A^{op}$.

This example is of particular interest in connection with the Connes-Kirchberg problem, that is equivalent to the question whether $C^*(\mathbb{F}_\infty)$ (or $C^*(\mathbb{F}_2)$), which is known to have the LLP, also has the WEP. Our C^* -algebra A has the same collection of finite dimensional operator subspaces as $C^*(\mathbb{F}_2)$ or $C^*(\mathbb{F}_\infty)$. The talk will start by a brief introduction to tensor products of C^* -algebras and to Kirchberg's conjectures in his 1993 Inventiones paper.

Christopher Schafhauser (University of Nebraska-Lincoln)

Title: *Classifying nuclear $*$ -homomorphisms*

Abstract: A conjecture of George Elliott dating back to the early 1990's asks if separable, simple, nuclear C^* -algebras are determined up to isomorphism by their K -theoretic and tracial data. Restricting to purely infinite algebras, this is the famous Kirchberg-Phillips Theorem. The stably finite setting proved to be much more subtle and has been a driving force in research in C^* -algebras over the last 30 years. A series of breakthroughs were made in 2015 through the classification results of Elliott, Gong, Lin, and Niu and the quasidiagonality theorem of Tikuisis, White, and Winter. Today, the classification conjecture is now a theorem under two additional regularity assumptions: \mathcal{Z} -stability and the UCT. I will discuss recent joint work with José Carrión, Jamie Gabe, Aaron Tikuisis, and Stuart White which obtains a classification of morphisms between classifiable algebras and provides a much shorter and more conceptual proof of the classification theorem in the stably finite setting.

Karen Strung (Czech Academy of Sciences)

Title: *TBA*

Abstract: TBA

Hang Wang (East China Normal University)

Title: *Index theory for elliptic operators invertible at infinity*

Abstract: An elliptic differential operator on a complete manifold, which is invertible outside a compact set, is Fredholm and also admits a higher index in the K -theory of the C^* -algebra of the fundamental group. Interesting examples involve manifolds admitting a positive scalar curvature metric outside a compact set and also the Atiyah-Patodi-Singer index theory for

manifold with boundary. We propose an approach to obtain the Fredholm index and its generalizations for this type of operators, as applications we obtain (equivariant) index formulas for manifolds with boundaries and with corners.

This is joint work with Peter Hochs, Bai-Ling Wang and with Xiaoman Chen, Hongzhi Liu and Guoliang Yu.

Kun Wang (University of Puerto Rico)

Title: *Classification of C^* -algebras and the Invariants*

Abstract: In my talk, I will talk about classification of AH algebras with the ideal property, with no dimension growth, and have finitely many ideals. In particular, we will introduce an invariant including Hausdorffified algebraic K_1 group and another refined version of the invariant. At last, we show that the Hausdorffified algebraic K_1 part is not necessary for our setting.

Wilhelm Winter (University of Muenster)

Title: *Completely positive approximations revisited*

Abstract: I will give an overview of how completely positive approximations reflect the fine structure of nuclear C^* -algebras. This includes topological and dynamic features, but also K-theory and trace spaces.

Jianchao Wu (Texas A&M University)

Title: *Dynamical analogues of Cuntz semigroups, strict comparison and Z-stability*

Abstract: Regularity properties of C^* -algebras, e.g., Z-stability and strict comparison, have played crucial roles in the Elliott classification program. The equivalences (or at least close relations) between regularity properties of very different natures were predicted by the Toms-Winter conjecture and have been a central topic in the structure theory of simple nuclear C^* -algebras in the last 15 years. I will discuss ways to transport these ideas to the setting of C^* -dynamical systems. More precisely, I will talk about dynamical Cuntz semigroups, dynamical strict comparison, and the notion of almost elementary C^* -dynamical systems, which generalizes Kerr's almost finiteness for topological dynamical systems and can be viewed as a dynamical analogue of Z-stability. This is joint work with Bosa, Perera, and Zacharias.

Jiawen Zhang (University of Southampton)

Title: *Asymptotic expanders and quasi-locality*

Abstract: In this talk, I will introduce the notion of "asymptotic expanders" recently defined by Li, Nowak, Spakula and myself. It generalises the classical notion of expanders, while our

structure result shows that their geometry is not too far from that of expanders. I will also introduce the analytic motivation from quasi-locality, and explain applications to the coarse Baum-Connes conjecture. This is a joint work with Ana Khukhro, Kang Li and Federico Vigolo.

Registered Participants

Name	Association	Region
Abolfazl Alikhani	SBU	Iran
Dawn E Archey	University of Detroit Mercy	United States
M. Ali Asadi-Vasfi	University of Tehran	Iran
María de Nazaret Cueto Avellaneda	University of Almería	Spain
Hikaru Awazu	University of Tokyo, Graduate school of mathematical science	Japan
Sara Azzali	University of Hamburg	Germany
Ilnur Baibulov	Saint Petersburg State University	Russia
Elnaz Bakhshi	University of Zanjan	Iran
Keshab Chandra Bakshi	Chennai Mathematical Institute	India
Jean V Bellissard	WWU Münster Germany and Georgia Institute of Technology	Germany
Daniel Beltita	Romanian Academy	Romania
Arnab Bhattacharjee	Indian Institute of Science Education and Research, Bhopal	India
Christian Bönicke	University of Glasgow	United Kingdom
Jorge Castillejos	IMPAN	Belgium
You Chao	Harbin Institute of Technology	China
Ioannis Diamantis	NTUA	Greece
Yizhong Ding	Inner Mongolia University	China
George A. Elliott	University of Toronto	Canada
Menevse Eryuzlu	Arizona State University	United States
David Evans	Cardiff	United Kingdom
Shaoming Fang	Shaanxi Normal University	China
Qingzhai Fan	Shanghai Maritime University	China
Carla Farsi	University of Colorado	United States
Uwe Franz	University of Bourgogne Franche-Comté	France
Xuanlong Fu	Shanghai Center for Mathematical Sciences, Fudan University	China
Anna Gow	Carleton University	Canada
Ved Prakash Gupta	Jawaharlal Nehru University, New Delhi	India
Lucas Hall	Arizona State University	United States
Zhuofeng He	Research Center for Operator Algebras, ECNU	China
Ilan Hirshberg	Ben Gurion University of the Negev	Israel
Jiajie Hua	Jiaying University	China
Bhishan Jacelon	Cape Breton University	Canada
Sayed Jamal	Jawzjan University	Afghanistan
Abolfazl Seyed Javadein	Amirkabir University of Technology (Tehran Polytechnic)	Iran
Baojie Jiang	Chongqing University	China
Yongle Jiang	Dalian University of Technology	China
Ja A Jeong	Seoul National University	Republic of Korea
Michael Jury	University of Florida	United States

Lavy Loilpitchai	Indian Statistical Institute Bangalore	India
Julian Kranz	WWU Münster	Germany
Amudhan Krishnaswamy-Usha	Texas A&M University	United States
Alex Kumjian	University of Nevada, Reno	United States
Yulia Kuznetsova	University Bourgogne Franche Comté	France
Kang Li	Polish Academy of Sciences	Poland
Hung-Chang Liao	University of Ottawa	Canada
Ying-Fen Lin	Queen's University Belfast	United Kingdom
Huaxin Lin	University of Oregon	China
Han Liu	Fudan University	China
Junping Liu	East China Normal University	China
Rui Liu	Nankai University	China
Shudong Liu	Qufu Normal University	China
Yanlin Liu	Fudan University	China
Yifan Liu	East China Normal University	China
Zhongyan Li	North China Electric Power University	China
Lvlin Luo	Fudan University	China
Zheng Luo	East China Normal University	China
Shen Lu	University of Colorado Boulder	United States
Ed McDonald	UNSW Sydney	Australia
Hui-Xian Meng	North China Electric Power University	China
Milad	IUST	Iran
Atish Mitra	Montana Tech	United States
Ameneh Mohammadi		Iran
Mahdi Moosazadeh	Tarbiat Modares University	Iran
S. P Murugan	Indian Institute of Science Education and Research	India
Zahra Naghavi	Tarbiat Modares University	Iran
Tron Omland	University of Oslo	Norway
Hiroyuki Osaka	Ritsumeikan University	Japan
Judith A. Packer	University of Colorado, Boulder	United States
Francesc Perera	Universitat Autònoma de Barcelona	Spain
Jin Qian	East China Normal University	China
Yu Qiao	Shaanxi Normal University	China
Reyhaneh	Kharazmi university	Iran
Min Ro	University of New Mexico, Los Alamos	United States
Mehdi Rostami	Amirkabir University of Technology	Iran
Hridoyananda Saikia	Indian Statistical Institute, Kolkata	India
Sarah	Isfahan university of technology	Iran
Damian Sawicki	MPIM	Germany
Thomas Scheckter	UNSW	Australia

Claude Schochet	The Technion, Haifa	Israel
Saeed Shaabani	Tarbiat modares Tehran	Iran
Ali Shakibazadeh	Tarbiat Modares University	Iran
Sundar Shanmugasundaram	Institute of Mathematical Sciences, Chennai	India
Mohammad Shavandi	University of Mazandaran	Iran
Adam Skalski	IMPAN	Poland
Yunfei Song	Shaanxi Normal University	China
Sruthymurali	IMSc, Chennai	India
Xiaoyu Su	Texas A&M University	United States
Kaori Taguchi	Tokushima University	Japan
Frank Taipe	Paris-Saclay University	France
F. Talebi		Iran
Hannes Thiel	University of Muenster	Germany
Ian Thompson	University of Manitoba	Canada
Jonathan Turk	Arizona State University	United States
Eduard Vilalta	Universitat Autònoma de Barcelona	Spain
Maria Grazia Viola	Lakehead University	Canada
Cangyuan Wang	East China Normal University	China
Hang Wang	East China Normal University	China
Jinmin Wang	Fudan University	China
Junqi Wang	Tongji University	China
Qin Wang	East China Normal University	China
Simeng Wang	Université Paris-Saclay	France
Zhen Wang	Putian University	China
Zhongli Wang	Tongji University	China
Zijing Wang	East China Normal University	China
Mateusz Wasilewski	KU Leuven	Belgium
Changguo Wei	Ocean University of China	China
Melchior Wirth	IST Austria	Germany
Jianchao Wu	Texas A&M University	United States
Ding Xin	Ocean University of China	China
Jingwen Xu		Japan
Kai Yan	Fuzhou University	China
Yeganeh	Fasa	Iran
Joachim Zacharias	University of Glasgow	United Kingdom
Chaohua Zhang	East China Normal University	China
Jianguo Zhang	East China Normal University	China
Yazhou Zhang	East China Normal University	China
Xia Zhao	Tongji University	China
Dapeng Zhou	East China Normal University	China

About Us

Research Center for Operator Algebras is under the direct auspices of East China Normal University and was founded in 2010. Currently, it is located on the 5th floor of Science Building A (the highest building) in ECNU ZhongShan North Road campus, Shanghai, China.

This center focuses on the research related to operator algebra and functional analysis. It attaches great importance to collaboration home and abroad. So far it has set up frequent academic relationships and links with several well-known institutes and research centers in terms of scientific researches and cooperations.

Quite a few international conferences and symposiums on operator algebras have been held here. Every year, a number of famous mathematicians are invited to give lectures and conduct researches in the center.

To promote the developments in operator algebra and related fields, we welcome students and visiting scholars all over the world to come for study and work (for either long term or short term).

Emergency Contact

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