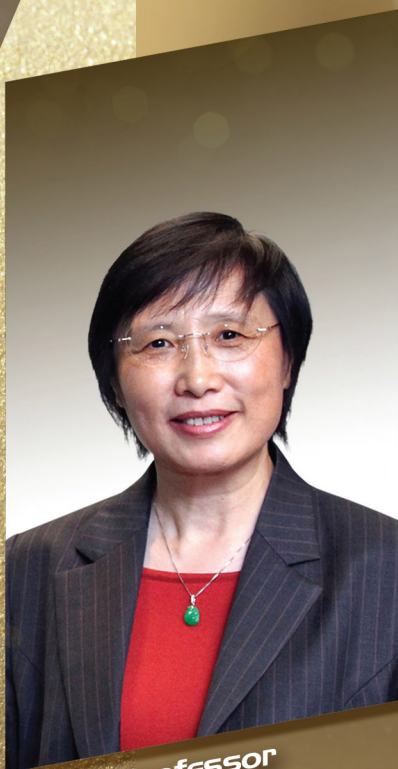


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AMA Staff have been Honoured with Prestigious Awards



Chair Professor
Chen Xiaojun



Associate Professor
Qiao Zhonghua



Dr Fridolin Ting

HIGHLIGHTS

Three AMA colleagues have recently received esteemed awards for their outstanding research and teaching contributions.

Chair Professor Chen Xiaojun conferred SIAM Fellowship 2021

Professor Chen was elected as a 2021 Fellow of the Society of Industrial and Applied Mathematics (SIAM) in recognition of her contributions to optimization, stochastic variational inequalities, and nonsmooth analysis.

‘I am honored to be recognized by SIAM for contributions to optimization, stochastic variational inequalities, and nonsmooth analysis.’

Professor Chen has an excellent track record in academic research and research leadership. Her research interests include stochastic equilibrium problems and nonsmooth/nonconvex optimization. Having published over 80 research papers in top journals of applied mathematics, she was invited to give plenary and semi-plenary talks at many international conferences in the USA, Europe, South America, Australia and Asia. Furthermore, Professor Chen has won 20 grants as a principal investigator from Australian Research Council, the Japan Society for the Promotion of Sciences and the Hong Kong Research Grants Council. She also serves in the editorial boards of 8 international journals including SIAM Journal on Numerical Analysis and SIAM Journal on Optimization.

As Head of AMA (July 2013 - June 2019), the Director of University Research Facility in Big Data Analytics at PolyU and a Co-Director of the Chinese Academy of Sciences (CAS) Academy of Mathematics and Systems Science (AMSS) and PolyU Joint Laboratory of Applied Mathematics, Professor Chen has made a highly significant contribution to the promotion and maintenance of high professional standards in mathematical research in PolyU.



Associate Professor Qiao Zhonghua named RGC Research Fellow 2020/21

Dr Qiao Zhonghua was selected as one of the 10 awardees of the Research Grant Council (RGC) Research Fellow 2020/21. He is also the first and the only winner from PolyU. Introduced in 2019/20 academic year, the RGC Research Fellow Scheme (RFS) is a new regular fellowship scheme for researchers at the rank of associate professor. It aims to support exceptionally outstanding academics at their mid-career in the 8 UGC-funded universities in Hong Kong.

‘I feel very honored to be supported by the RGC Research Fellow Scheme. It provides sustained support to me for a period of 60 months with teaching and administrative duty relief, which helps me concentrate more on my research’

Having joined PolyU in 2011, Dr Qiao’s research interest lies in numerical analysis and scientific computing. He won the Early Career Award 2013/14 presented by the Hong Kong Research Grants Council, and The Hong Kong Mathematical Society Award for Young Scholars in 2018. He is an Associate Co-Director of the Chinese Academy of Sciences (CAS) Academy of Mathematics and Systems Science (AMSS) and PolyU Joint Laboratory of Applied Mathematics and a council member of The Hong Kong Mathematical Society.



Dr Fridolin Ting won The President’s Award for Outstanding Achievement 2019/2020 - Teaching and finalist of UGC Teaching Award 2020

Our Teaching Fellow Dr Fridolin Ting received the President’s Award for Outstanding Achievement 2019/20 as a recognition of his dedication on teaching.

‘I am truly humbled, honoured and grateful to have received the President’s Award, which would not have been possible without the support of PolyU’s senior administrators and AMA colleagues.’

On top of the President’s Award, Dr Ting’s pedagogy has been well recognized by winning several teaching awards. He received FAST Faculty Awards 2019/20 (Teaching), and was shortlisted as one of the seven finalists among 17 outstanding nominees of UGC Teaching Award 2020 organized by The University Grants Committee (UGC). This annual award aims to honour academics of the UGC-funded universities for their outstanding teaching performances and achievements, as well as their leadership and scholarly contributions to teaching and learning within and across universities. Having gone through a rigorous process undertaken by a Selection Panel convened by Professor Marilee Bresciani Ludvik of San Diego State University, the effort of Dr Ting dedicated on active learning has paid off despite not winning the award.



Moreover, Dr Ting also won the Gold Award of Exemplary Teaching and Learning Award presented by eLearning Forum Asia (eLFA) 2020-2021 for championing best practices in the effective use of pedagogically driven technology for teaching and learning. For details, please visit <http://elfasia.org/2020/about-elfasia/>



ACCOMPLISHMENTS

Thanks to the extra effort and hard work of our colleagues, the Department has overcome many odds and made a lots of accomplishments during this challenging period. On top of the aforementioned prestigious awards, we are proud to share our recent achievements in research and teaching:

AMA won record high RGC funding amount in 2020

The Department was honoured to have received funding support for 12 projects from RGC General Research Fund and Early Career Scheme in 2020. The funding amount set a new record of AMA and ranked the 2nd high among PolyU's departments.

Chair Professor Sun Defeng named CSIAM Fellow 2020

Professor Sun was selected as one of the eight elected Inaugural Fellows of the China Society for Industrial and Applied Mathematics (CSIAM). CSIAM Fellow is an honorific title for life, in recognition of distinguished members for their contributions to the field of industrial and applied mathematics.

Founded in 1990, CSIAM is a nongovernmental organization for Chinese applied mathematicians. Supervised by the Ministry of Science and Technology of the People's Republic of China, it aims to strengthen the communication between academia and industry, and promote collaboration between mathematicians, engineers, technicians and corporate executives. It will help solve mathematical problems which hinders economic and technological development, as well as advance the research and education in applied mathematics.



Emeritus Professor Qi Liqun named "Clarivate™ Highly Cited Researcher in Mathematics 2020" and ranked the world's top 20 most-cited scientists in OR

Our heartfelt congratulations to Professor Qi who was named 'Clarivate™ Highly Cited Researchers in the field of Mathematics' in 2020. The highly anticipated list identifies researchers who demonstrated significant influence in their chosen field or fields through the publication of multiple highly cited papers during the last decade. Their names are drawn from the publications that rank in the top 1% by citations for field and publication year in the Web of Science™ citation index. 6,167 researchers from over 60 countries and regions have been recognized in 2020. Having published more than 330 research papers in international journals, Professor Qi's works have been cited by researchers around the world. According to the Google Scholar, Professor Qi has an H-index value of 70 and his work has been cited over 21,700 times as of May 2021.



Professor Qi Liqun

Ranked

16

Operations Research
Field size : 23,455

Moreover, Professor Qi was ranked 16 among 23,455 scientists in the field of Operations Research (OR) according to the "Updated science-wide author databases of standardised citation indicators" compiled by Stanford University. Created by a research team led by Professor John Ioannidis, it is a database of more than 100,000 top scientists across the world on the basis of standardised citation indicators. They were grouped into 22 subject fields and 176 sub-fields using the indicators which included information on citations, an individual's scientific research output, co-authorship and a composite indicator for career-long citation impact up to the end of 2019.

AMA scholars ranked among the world's top 2% most-cited scientists in Operations Research

According to the "Updated science-wide author databases of standardised citation indicators" by Stanford University, another 3 AMA scholars are ranked among the world top 2% most-cited scientists in the field of Operations Research. They are Professors Chen Xiaojun, Sun Defeng and Yang Xiaoqi.



Yang Xiaoqi



Chen Xiaojun



Sun Defeng

Assistant Professor Dr Yue Man Chung won RGC Early Career Award 2020/21

Dr Yue was awarded for his project on "Distributional Robustification with Fisher-Rao Ambiguity Sets" under the RGC Early Career Scheme in 2020/21. His research project was rated excellent among the 163 projects funded by the RGC Early Career Scheme in 2020/21.



AMA PALMS team scored various esteemed teaching awards

AMA's UGC Teaching and Learning Pedagogic and Active Learning Mobile Solutions (PALMS) Project Team led by Dr Fridolin Ting received Bronze Award in the "Science of Learning" category, Reimagine Education Awards 2020/21, the "Oscar of Education". The awards in this category were given to the projects that most successfully further scientific, humanistic and critical theoretical understanding of learning, engage in the design and implementation of learning innovations, and consequently improve instructional methodologies. Among the 1,400 applications and more than 200 independent judges, PALMS project was the only awardee among the 5 shortlisted PolyU projects this year. For details, please visit <http://elfasia.org/2020/about-elfasia/>



EVENTS & ACTIVITIES

Distinguished Lectures



The Anatomy of the World's Fastest Linear Equation Solver
Prof. Nicholas J. Higham
University of Manchester, UK
25 September 2020

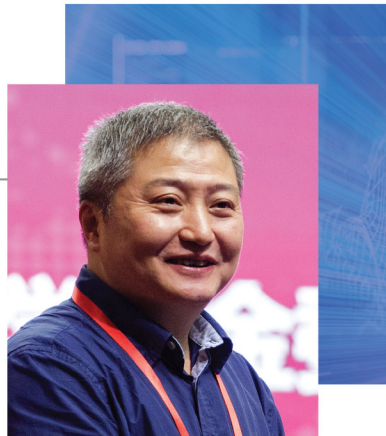
Distributionally Robust Stochastic Programming
Prof. Alexander Shapiro
Georgia Institute of Technology, USA
6 October 2020



Modeling Targeted Closures for Epidemic Control with Application to COVID-19
Prof. John Birge
The University of Chicago
Booth School of Business, USA
10 November 2020



A Positive and Asymptotic Preserving Filtered P_N Method for the Gray Radiative Transfer Equations
Prof. Song Jiang
Institute of Applied Physics and Computational Mathematics, China
2 December 2020



Stochastic Kolmogorov Systems and Some Applications
Prof. George Yin
University of Connecticut, USA
18 January 2021



Workshops and Seminars

- **Workshop on Collaboration and Exchange Project between Shandong University and The Hong Kong Polytechnic University**
22 August 2020
- **The 3rd Asian Quantitative Finance Seminar**
17 October 2020
- **Guangdong-Hong Kong-Macao Greater Bay Area Online Workshop on the Evolution and Spread of Influenza, jointly held by AMA and SN**
24 November 2020

Joint seminar series by AMA and UBDA:



• **Development in Official Statistics Dissemination Services and Resources on Public Sector Open Data**
Mr Jimmy Lin
Census and Statistics Department
HKSAR Government
6 November 2020

• **Use of Big Data in Weather Services at the Hong Kong Observatory**
Dr Ho Chun Kit
Hong Kong Observatory
11 December 2020



Financial Mathematics/Engineering joint seminar series by CUHK and PolyU :



• **Angry Borrowers: Negative Reciprocity in a Financial Market**
Prof. Yang Jun
Indiana University, USA
26 February 2021

• **Equilibrium Asset Pricing with Transaction Costs**
Dr Martin Herdegen
University of Warwick, UK
25 March 2021



Programme and Student News

Online Alumni Sharing Series 2021

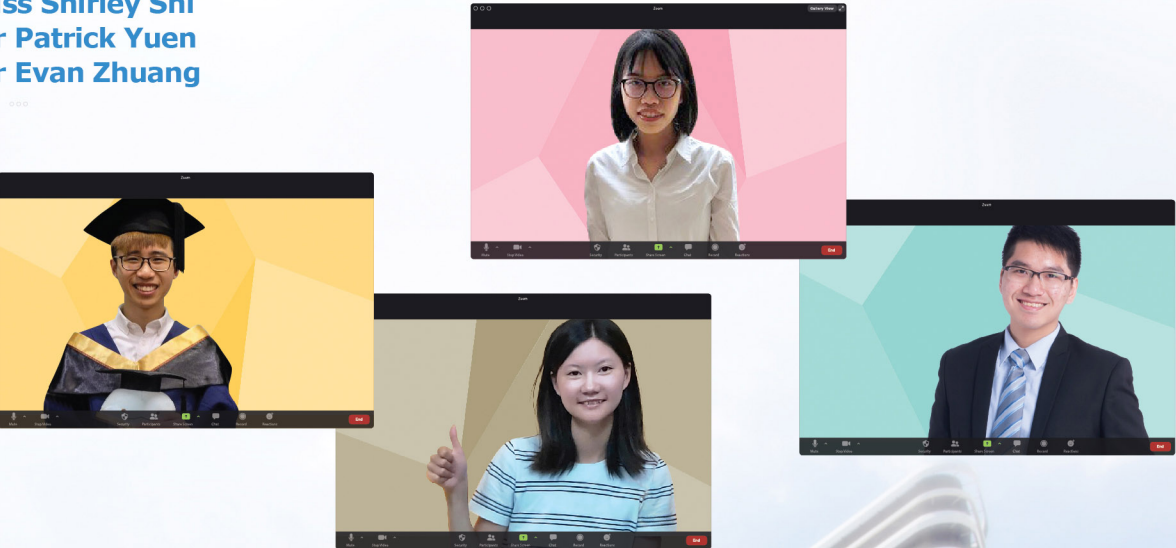
Aiming to inspire students for early career planning/ further study and enhance their understandings on the real-world job market, the Department organized three online sharing sessions in January and February 2021. Alumni who are working in various industries/ pursuing postgraduate degrees were invited to the sessions and shared their valuable experience on landing a successful career with students. The Department would like to extend sincere appreciation to the participating alumni:

Investment Science

- Mr Vincent Au
- Mr Nomis Ho
- Miss Hu Yuchen
- Mr Kan Liu
- Miss Charlotte Ng
- Miss Shirley Shi
- Mr Patrick Yuen
- Mr Evan Zhuang

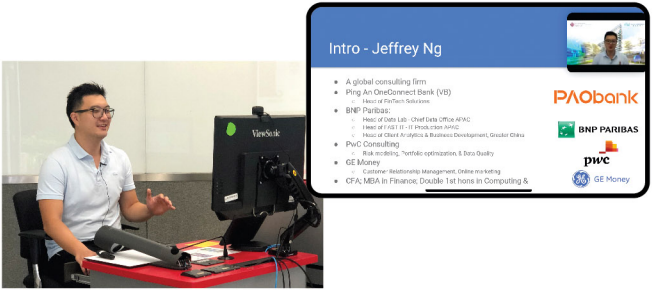
Data Science and Analytics

- Miss Rebecca Chan
- Miss Cherly Wong



Online Freshman Seminar Series 2020

With an aim of enhancing students' understanding of the real-world applications of Mathematics, Statistics and Computer Science skills as well as the discipline-based professional career development, the Department hosted a series of seminars and invited experts from a wide array of industries to share their valuable experience in the respective industries.



Mr Jeffrey Ng Certified Financial Analyst (CFA) and Certified Data Scientist (CDS)

18 September 2020

Mr Elvis Wong Investment Advisor - Private Banking Bank Julius Bär

9 October 2020



Dr Stan Yip Chartered Statistician of Royal Statistical Society

23 October 2020

Mr William Tse Consulting Director, Frontier Research & Technology Limited

30 October 2020



FAST Outstanding Student Award 2020

Congratulations! Our Investment Science student Miss Zhao Xiaohan received the Outstanding Student Award of the Faculty of Applied Science and Textiles 2020.



FAST and AMA Outstanding PhD Thesis Awards 2019/20

We also congratulate Drs Wang Kai and Xu Sheng for receiving FAST and AMA Outstanding PhD Thesis Awards, respectively.



Dr Wang Kai



Dr Xu Sheng

STAFF NEWS

Departmental Best Paper/ Teacher/ Instructor Awards 2020/2021

Congratulations to the following awardees who have dedicated and excelled in their teaching and research:



Prof. Li Xun

"Discrete Time Mean-field Stochastic Linear-quadratic Optimal Control Problems", Automatica, Vol 49, Issue 11, 3222-3233 (2013) (co-authors: Robert Elliott, Ni Yuan-Hua)

Dr Zhou Zhi

"Two Fully Discrete Schemes for Fractional Diffusion and Diffusion-wave Equations with Nonsmooth Data", SIAM Journal on Scientific Computing, Vol. 38, no. 1, pp. A146-A170 (2016) (co-authors: Jin Bangti, Raytcho Lazarov)

Dr Zhang Zaikun

"Direct Search Based on Probabilistic Descent", SIAM Journal on Optimization, Vol. 25, no. 3, pp. 1515-1541 (2015) (co-authors: S. Gratton, C. W. Royer, L. N. Vicente)



Dr Alex Wong Dr Zhang Hua



Dr Allen Tai

Promotion

We would like to congratulate the following colleagues for their promotion recently:

- Dr Fridolin Ting was promoted to Senior Teaching Fellow on 1 June 2021
- Dr Allen Tai was promoted to Teaching Fellow on 1 June 2021
- Profs Qiao Zhonghua and Wang Zhian will be promoted to Professors on 1 July 2021
- Dr Jiang Binyan will be promoted to Associate Professor on 1 July 2021

New Staff Appointment

We would like to welcome the following colleagues who join the AMA family recently:



Dr Fu Guanxing Assistant Professor

- Doctor of Science, Humboldt-Universität zu Berlin, 2018
- Research interests: Mean Field Game and its connection with Financial Mathematics, Probability and Deep Learning
- Joins AMA in December 2020



Dr Bai Kuang Research Assistant Professor

- PhD, University of Victoria, 2020
- Research interests: Nonsmooth Optimization, Variational Analysis, Bilevel Optimization
- Joins AMA in September 2020



Dr Ding Yi Research Assistant Professor

- PhD, The Hong Kong University of Science and Technology, 2020
- Research interests: Financial Econometrics, High-Dimensional Statistics, Financial Technology, Statistical Learning
- Joins AMA in August 2020



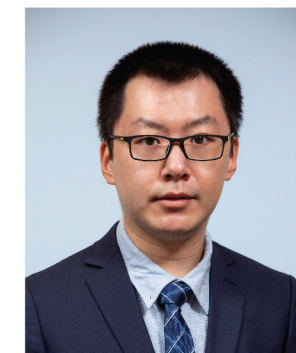
Dr Gao Yu Research Assistant Professor

- PhD, Harbin Institute of Technology, 2018
- Research interests: Nonlinear Dispersive Equations, Kinetic Equations
- Joins AMA in June 2020



Dr Lee Chun Yin, James Research Assistant Professor

- PhD, University of Hong Kong, 2020
- Research interests: Change Point Modelling, Epidemiological Study, Nonparametric Estimation, Survival Analysis
- Joins AMA in October 2020



Dr Li Xiao Research Assistant Professor

- PhD, Beijing Normal University, 2016
- Research interests: Numerical analysis, Scientific Computation
- Joins AMA in July 2020



Dr Tang Wenlu Research Assistant Professor

- PhD, The Chinese University of Hong Kong, 2020
- Research interests: Semiparametric Efficiency, Robust Estimation
- Joins AMA in October 2020



Dr Yuan Yancheng Research Assistant Professor

- PhD, National University of Singapore, 2020
- Research interests: Large/Huge Scale SSparse Optimization, Mathematical Foundation for Data Science, Mathematical Foundation for Data science
- Joins AMA in March 2021

Miss Teresa Ko, Assistant Officer, joins us in March 2021

Departure

Dr Louis Leung, Miss Polly Mok and Miss Cindy Lu have left the Department recently to pursue other endeavors. We thank them for their dedicated services and wish them all the best.



Dr Yue's son, Sau Yuen



Dr Yu's daughter, Sally

New bundle of joy

We are so happy for Drs Yue Man Chung and Yu Xiang who welcomed their new additions to their families in July and October 2020, respectively.

Editorial Board

Prof. Sun Defeng
Dr Zhou Zhi

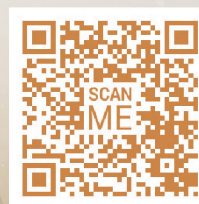
Prof. Lin Yanping
Dr Bob He

Dr Raymond Sze
Miss Eunice Hung

Dr Pong Ting Kei
(Editor in Chief)

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