

at the Lobby of the Brawway Hotel, followed by a Welcome Dinner at the Zhuang Yuan Lou Restaurant. Additional registrations were handled the morning of Thursday, June 6 at the workshop venue on the campus of SUIBE, prior to the formal opening ceremony which included a speech from Yonglin Xu (Vice President, SUIBE). This was followed by a photo session. Lunch and dinner were provided for all participants each day at the workshop venue. The workshop banquet was held on Friday evening at the Zhuang Yuan Lou Restaurant. The workshop closed just before lunch on Sunday, June 9.

The website for IWMS-2019 is: <http://www.suibe.edu.cn/ttxy/iwms2019>

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## 8<sup>th</sup> International Conference on Matrix Analysis and Applications (ICMAA 2019) University of Nevada, Reno, USA, July 15–18, 2019

**Report by Tin-Yau Tam, Qing-Wen Wang, and Fuzhen Zhang**

The 8<sup>th</sup> International Conference on Matrix Analysis and Applications (ICMAA 2019) took place July 15–18, 2019 at the University of Nevada, Reno (UNR), Nevada, USA. Organized by Tin-Yau Tam, Qing-Wen Wang and Fuzhen Zhang, the meeting aimed to stimulate research and interaction of mathematicians in all aspects of linear and multilinear algebra, matrix analysis, graph theory, and their applications and to provide an opportunity for researchers to exchange ideas. There were 60 participants from 10 countries, and 38 talks. The keynote speaker was Lek-Heng Lim of the University of Chicago, USA and the two plenary speakers were Shaun Fallat of the University of Regina, Canada and Shmuel Friedland of the University of Illinois at Chicago, USA. The meeting was generously supported by the International Linear Algebra Society, as well as by the Office of Research and Innovation, the College of Science, and the Department of Mathematics and Statistics of UNR.



*Group photo from ICMAA 2019*

The previous ICMAA conferences were held in China (Beijing, Hangzhou), the United States (Nova Southeastern University), Turkey (Selçuk University, Konya), Vietnam (Duy Tan University, Da Nang), and Japan (Shinshu University, Nagano Prefecture). The next two conferences will be held at the University of Aveiro, Portugal (June 18–20, 2020) and Yunnan University, Yunnan, China (July 23–26, 2021). When the time comes, more information will be announced via ILAS-NET.

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## International Conference on Matrix Analysis and its Applications (MAT-TRIAD 2019) Liblice, Czech Republic, September 8–13, 2019

**Report by Milan Hladík and Miroslav Rozložník**

The 8<sup>th</sup> international conference on Matrix Analysis and its Applications, MAT-TRIAD 2019, was held September 8–13, 2019 in Liblice (about 40 km from Prague) at the Conference Center of the Czech Academy of Sciences. MAT-TRIAD

2019 was an ILAS-endorsed meeting and a registered satellite meeting of the International Congress on Industrial and Applied Mathematics (ICIAM) held in Valencia, Spain, July 15–19, 2019. MAT-TRIAD 2019 brought together researchers sharing an interest in a variety of aspects of matrix analysis and its applications to many areas of science. It gave an opportunity to introduce advanced researchers, younger colleagues, and students to recent developments in matrix and operator theory, spectral problems, numerical linear algebra, combinatorial matrix theory, and applications of linear algebra to statistics, optimization or graph theory.



*Group photo from MAT-TRIAD 2019*

The conference was co-organized by the Institute of Mathematics of the Czech Academy of Sciences, the Faculty of Mathematics and Physics of Charles University, and by the Institute of Computer Science of the Czech Academy of Sciences, all located in Prague. The Scientific Committee of MAT-TRIAD consisted of Natália Bebiano (University of Coimbra, Portugal), Ljiljana Cvetković (University of Novi Sad, Serbia), Heike Faßbender (Technical University Braunschweig, Germany), Simo Puntanen (University of Tampere, Finland) and Tomasz Szulc (Adam Mickiewicz University, Poznań, Poland). The Local Organizing Committee consisted of Miro Rozložník, Milan Hladík, Hana Bílková, Jan Bok, David Hartman, Jaroslav Horáček, Miroslav Tůma and Petr Tichý (all from the Czech Academy of Sciences or Charles University, Prague, Czech Republic).

The scientific program of the conference consisted of 2 invited lectures, 6 invited talks and 63 contributed talks, including 35 talks in 4 special sessions: Total positivity (organisers: Mohammad Adm and Jürgen Garloff), Tropical matrix algebra and its applications (organisers: Aljoša Peperko and Sergei Sergeev), Recent developments of verified numerical computations (organizers: Takeshi Ogita and Siegfried M. Rump) and Interval matrices (organiser: Milan Hladík). The invited lectures were delivered by Shmuel Friedland (University of Illinois at Chicago) as the Hans Schneider ILAS Lecturer, with the lecture “The Collatz-Wielandt quotient for pairs of nonnegative operators” and by Zdeněk Strakoš (Charles University, Prague) with the lecture “Operator preconditioning, spectral information and convergence behavior of Krylov subspace methods”. The invited speakers were Dario Bini (University of Pisa), Mirjam Dür (University of Augsburg), Arnold Neumaier (University of Vienna) and Martin Stoll (Technical University of Chemnitz). The remaining two invited talks were given by the two recipients of the Young Scientist Award from MAT-TRIAD 2017: Álvaro Barreras (Universidad Internacional de La Rioja) and Ryo Tabata (National Institute of Technology, Fukuoka).



*Winners of the MAT-TRIAD 2019 Young Scientist Award: Marie Kubínová (left) and Yuki Nishida.*

Following long-term tradition, during the conference closing the members of the Young Scientist Award Committee announced the winners of the award for the best talks presented by Ph.D. students and young scientists: Marie Kubínová (Czech Republic) and Yuki Nishida (Japan). These winners will be invited speakers at the MAT-TRIAD conference to be held the second or third week of September 2021 in Curia, Portugal.

A special issue of *Applications of Mathematics* will be devoted to MAT-TRIAD 2019, featuring selected papers related to the presentations given at the meeting. The conference participants represented a well-balanced combination of high-calibre speakers and new faces in the field. They shared the common opinion that the conference was professionally organized, with a friendly and warm atmosphere.

The scientific program and book of abstracts from MAT-TRIAD 2019 and other information about the conference can be found at <https://mattriad.math.cas.cz>.