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**CARAMS**

International Conference on Linear Algebra and its Applications (ICLAA 2021)



December 15 - 17, 2021

**Preconference Workshop on Nonnegative Matrices and Graphs
December 06-12, 2021**



Endorsed by



International Linear
Algebra Society

Centre for Advanced Research in
Applied Mathematics and Statistics
Manipal Academy of Higher Education, Manipal
Karnataka 576 104, India

In association with

Department of Data Science, PSPH, MAHE, Manipal, Department of Mathematics, MIT, MAHE, Manipal,
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Visit us at <http://carams.in/iclaa2021>

About the Conference

The present conference shall provide a platform for leading Mathematicians and Statisticians, working around the globe in the theme area to discuss several research issues and to introduce new innovations. The main goal of the conference is to bring experts, young researchers, and students together to present recent developments in this dynamic and important field. The conference also aims to stimulate research and support the interaction between the scientists by creating an environment for the participants to exchange ideas and to initiate collaborations and professional partnerships. ICLAA 2021 is in sequel to the conferences CMTGIM 2012, ICLAA 2014, and ICLAA 2017 held in Manipal during January 2012, December 2014, and December 2017 respectively.

The theme of the conference shall focus on

- Classical Matrix Theory and Linear Algebra
- Nonnegative Matrices and Special Matrices
- Matrices and Graphs
- Combinatorial Matrix Theory
- Linear Statistical Inference
- Matrix and Graph Methods in Statistics
- Matrix and Graph Methods in Biological Sciences
- Matrices in Error Analysis and its Applications

About MAHE, Manipal

Manipal Academy of Higher Education is synonymous with excellence in higher education. MAHE is one of India's leading academic and research institutions. It has been granted Institution of Eminence status by the Ministry of Human Resource Development, Government of India. Over 28,000 students from 57 different nations live, learn and play in the sprawling University town, nestled on a plateau in Udupi district of Karnataka. It also has nearly 2500 faculty and almost 10000 other support and service staff, who cater to the various professional institutions in Health Sciences, Engineering, Management, Communication and Humanities which dot the Wi-Fi-enabled campus. The University has off-campus in Mangalore and Bangalore, and off-shore campuses in Dubai (UAE) and Melaka (Malaysia). The Mangalore campus offers medical, dental, and nursing programs. The Bangalore Campus offers programs in Regenerative Medicine. The Dubai campus offers programs in Engineering, Management and Architecture, and the Melaka campus offers programs in Medicine and Dentistry. Every institute has world class facilities and pedagogy, which are constantly reviewed and upgraded to reflect the latest trends and developments in higher education. For more details visit us <https://manipal.edu/>.

About CARAMS

CARAMS has been established in September 2018 at MAHE with the objective of fostering advanced research and training in the area of Mathematics, Statistics and their applications. It facilitates to bridge the gap between Mathematicians/Statisticians and Applied Mathematicians working in the area of Health, Technological, and Social Sciences. For more details visit: <http://carams.in>

Special Issue and Proceedings

Electronic Journal of Linear Algebra(ELA): The journal will publish a special issue dedicated to the conference (in honour of Prof. C. R. Rao). Articles focused in the broad area of Linear Algebra and its Applications, not necessarily presented in the conference, are invited for the possible publication in the special issue. Publication is subject to a normal review process set by the journal. For more details, please visit: <https://www.emis.de/journals/ELA/Home.html>.

Proceedings: We also invite, research and expository articles in the form of chapters focused on the theme area of ALAPS 2020, IWMS 2021 and ICLAA 2021 for the possible publication in a proceeding. Title of book the in honor of Prof. C. R. Rao will be "Applied Linear Algebra, Probability, and Statistics".

How to Register?

Enroll in our portal using the link <http://carams.in/registration> and then sign in to 'My Page' for further registration, guidelines for online fee payment, uploading of personal information, title and abstract of talk, and any relevant information.

Speakers

Rafikul Alam, Indian Institute of Technology, Guwahati
R. Balaji, Indian Institute of Technology, Madras
N. Balakrishnan, McMaster University, Canada
Ravindra B. Bapat, Indian Statistical Institute, Delhi
Adi Ben-Israel, Rutgers Business School, USA
Abraham Berman, Technion-Israel Institute, Israel
B. V. Rajaram Bhat, Indian Statistical Institute, Bangalore
Rajendra Bhatia, Indian Statistical Institute, Delhi
Arup Bose, Indian Statistical Institute, Kolkata
Shaun M. Fallat, University of Regina, Canada
Surender Kumar Jain, Ohio University, USA
Augustyn Markiewicz, Poznań Uni. of Life Sci., Poland

K. S. Murali, Indian Institute of Technology, Bombay
Samir K. Neogy, Indian Statistical Institute, Delhi
K. R. Parthasarathy, Indian Statistical Institute, Delhi
T. Parthasarathy, Chennai Mathematical Inst., Chennai
Sukanta Pati, Indian Institute of Technology, Guwahati
Simo Puntanen, Tampere University, Finland
T. E. S. Raghavan, Uni. of Illinois at Chicago, USA
K. P. S. Bhaskara Rao, Indiana Uni. Northwest, USA
Dietrich von Rosen, SLU Uppsala, Sweden
Bikas Kumar Sinha, Indian Statistical Institute, Kolkata
K. C. Sivakumar, Indian Institute of Technology, Madras
S. Sivaramkrishnan, Indian Inst. of Technology, Bombay

Hans Schneider ILAS lecture (2021) : Stephen J. Kirkland, University of Manitoba, Canada

The above is the initially confirmed list of speakers and for the update, refer to <http://carams.in/iclaa2021>.

Registration Fee

Category	ICLAA 2021	ICLAA 2021 + IWMS 2021
Foreign Nationals	\$350	\$350
Indian Nationals, Research Scholars and Faculty	₹2000 + GST	₹3500 + GST
Indian Students having no funding support	₹1000 + GST	₹2000 + GST

There is no GST for the Faculty/Research Scholars/UG/PG Students of MAHE

Registration Fee for Accompanying Person

Category	ICLAA 2021	ICLAA 2021 + IWMS 2021
Foreign Nationals	\$200	\$200
Indian Nationals, Research Scholars and Faculty	₹1000 + GST	₹2000 + GST

Accommodation

Registration fee covers registration kit, breakfast, lunch and dinner. Accommodation at a Guest House/Shared flats/Hostel/Fortune Inn Valley View will be arranged, on prior request on a payment basis. The payment towards the hostel accommodation may be partially/fully waived off/reimbursed by the organizers depending on the availability of funds.

Important Dates:

Last date for registration : **December 01, 2021**
Last date for abstract submission : **November 25, 2021**
Notification of abstract acceptance : **December 05, 2021**

Preconference Workshop (December 06-12, 2021)

Title : Nonnegative Matrices and Graphs
Resource Personnel : R. B. Bapat, A. Berman, S. Kirkland
Registration fee : ₹ 3000 (Indian Nationals), \$50 (Foreign Nationals).
Accommodation charges as applicable. Registration is open for limited number of ICLAA 2021 participants.
Contact Organizing Secretary for enrolment and fee payment/ fee waiver on or before November 15, 2021.

For more details visit: <http://carams.in/iclaa2021>