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**CARAMS**

International Workshop on Matrices and Statistics (IWMS 2021)



December 13 - 15, 2021





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

In association with

Department of Data Science, PSPH, MAHE, Manipal, Department of Mathematics, MIT, MAHE, Manipal,
Department of Mathematics, SMIT, Sikkim.

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Visit us at <https://carams.in/events/iwms2021/>

About the Workshop

CARAMS welcomes the opportunity to hold the 28th international workshop once again in India. The series of workshops started at University of Tampere, Finland in the year 1990 and the 27th was held at Shanghai, China. The 9th Workshop, the first one in India, was held at Hyderabad in 2000, celebrating 80th birthday of Calyampudi Radhakrishna Rao, popularly known as C. R. Rao. To know more about the history, see <https://tinyurl.com/y327rsv2>.

The purpose of the workshop is to stimulate research and, in an informal setting, to foster the interaction of researchers in the interface between statistics and matrix theory. The workshop will provide a forum through which statisticians may be better informed of the latest developments and newest techniques in linear algebra and matrix theory and may exchange ideas with researchers from a wide variety of countries. As well as range of plenary speakers we are to strengthening the interactions between participants by organizing a range of mini-symposia in various specialist areas. Beside organizing invited talks from eminent speakers, we invite participants to submit their research articles in the sessions of **contributory talks**.

Topics to be covered

- Matrix Analysis
- Projectors in Linear Models & Multivariate Analysis
- Growth Curve Models
- Linear Regression Models
- Linear Statistical Inference
- Modelling Covariance Structures
- Multivariate and Mixed Linear Models
- Statistics in Big Data Analysis

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 the bridging of the gap between Mathematicians/Statisticians and Applied Mathematicians working in the area of Health, Technological, and Social Sciences. For more details, visit <https://carams.in/>.

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

- N. Balakrishnan**, McMaster University, Canada
- Adi Ben-Israel**, Rutgers Business School, Newark
- Arup Bose**, Indian Statistical Institute, Kolkata
- Johann Gagnon-Bartsch**, University of Michigan, USA
- Susmita Datta**, Uni. of Florida, Gainesville, USA
- Stephen J. Haslett**, Massey University, New Zealand
- Jeffrey Hunter**, Auckland Univ. of Tech., New Zealand
- Lynn Roy LaMotte**, LSU Health Sciences Center, USA
- Vijayan Nair**, University of Michigan, USA
- Naveen N. Narisetty**, UoI, Urbana-Champaign, USA
- S. K. Neogy**, Indian Statistical Institute, Delhi
- Jianxin Pan**, University of Manchester, UK
- Simo Puntanen**, Tampere University, Finland
- B. L. S. Prakasa Rao**, CR Rao AIMSCS, Hyderabad
- Dietrich von Rosen**, SLU Uppsala, Sweden
- Arni S. R. Srinivasa Rao**, Medical Col. Of Georgia, USA
- George P. H. Styan**, McGill University, Canada
- Julia Volaufova**, LSU Health Sciences Center, USA

The above is the initially confirmed list of speakers and for the update, visit <https://carams.in/events/iwms2021/>

Registration Fee

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

Special Issue and Proceedings:

Electronic Journal of Linear Algebra(ELA): The journal will publish a special issue dedicated to ICLAA 2021 (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 the book in honor of Prof. C. R. Rao will be "Applied Linear Algebra, Probability, and Statistics".

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**

For more information visit us at <https://carams.in/events/iwms2021/>