Patrons:

Dr. M. Ramdas Pai Chancellor, MAHE, Manipal

Dr. H. S. Ballal

Pro Chancellor, MAHE, Manipal

Dr. H. Vinod Bhat

Vice Chancellor, MAHE, Manipal

Dr Poornima Baliga B

Pro Vice Chancellor (Health Sciences)

Vice Chancellor, MAHE, Manipal Registrar, MAHE, Manipal

Dr. Narayana Sabhahit Registrar, MAHE, Manipal

Scientific Advisory Committee:

Dr. Ravindra B. Bapat

ISI Delhi Centre

Dr. Manjunatha Prasad Karantha

CARAMS, MAHE, Manipal

Dr. S. K. Neogy ISI Delhi Centre

Dr. T. E. S. Raghavan

Dr. Narayana Sabhahit Dr. Manjunatha Prasad Karantha

University of Illinois at Chicago, USA

Organizing Secretary

CARAMS, MAHE, Manipal





MAGT 2018

National Workshop

Matrix Analysis and Game Theory



December 10-21, 2018

Members

Local Organizing Committee

Co-chairman

Dr. Asha Kamath MAHE, Manipal

Chairman

Dr. H. Vinod Bhat

Dr. Shreemathi Mayya

MAHE, Manipal

Dr. G. Sudhakara MIT, Manipal

Dr. C. Ramesha MIT, Manipal

Dr. Vasudeva Guddattu

MAHE, Manipal

Prof. Ashma Dorothy Monteiro

MAHE, Manipal **Prof. Nilima** MAHE, Manipal Dr. Ravishankar MAHE, Manipal Prof. Vipin

MAHE, Manipal

Dr. Sayed Mohammed Zeeshan

MAHE, Manipal

For more details, kindly contact

Prof. Vinay Madhusudhanan

MIT, Manipal

Dr. Divya Shenoy P

MIT, Manipal

Mr. Alex Chandy

Director-Public Relations & Media Communications, MAHE, Manipal

The Chief Warden

MIT Campus, MAHE, Manipal

The Chief Warden

Manipal Campus, MAHE, Manipal

Col. Badri Narayanan

Director-Purchase, MAHE, Manipal

Col. Prakash Chandra

Director General Services, MAHE, Manipal

Mr. B. P. Varadaraya Pai Director-Finance, MAHE, Manipal

Ms. N. G. Sudhamani Department of Statistics, MAHE, Manipal

Dr. Manjunatha Prasad Karantha

Organizing Secretary, MAGT 2018

Ph: +91 99801 00886

Email: km.prasad@manipal.edu kmprasad63@gmail.com

Centre for Advanced Research in Applied Mathematics and Statistics (CARAMS)

Manipal Academy of Higher Education, Manipal An Institute of Eminence (Status Accorded by MHRD)

carams@manipal.edu carams.mahe@amail.com Karnataka, India

***** +91 820 2922407

Centre for Advanced Research in Applied Mathematics and Statistics Level VI, Health Sciences Library Building, Manipal Academy of Higher Education, Manipal-576 104 Karnataka, India.

carams@manipal.edu carams.mahe@gmail.com **8** +91 820 2922407

+91 820 2570062

Workshop website: http://carams.in/magt Workshop email id: carams.mahe@gmail.com

About the Workshop

Contents of workshop include lectures and tutorials on nonnegative matrices and their applications in Game theory and Graphs, Game theory and Linear Complementarity Problem (LCP). Topics covered under matrix analysis are Positive Semidefinite matrices, Matrix functions, Nonnegative matrices, Perron theorems, Cones, Generalization of Nonnegative Matrices such as Q, Q_0 -matrices, Z-matrix, S-matrix, Positive subdefinite matrix, P_0 -matrix and its subclasses, Copositive, Copositive plus, Copositive star matrix, Eaves and Garcia class of matrices etc. with applications in Game theory and Graphs. The LCP starts with introduction, Complementary cone, existence and multiplicity of solutions to LCP, Matrix class useful in complementarity and Game theory, various generalizations of LCP, application of LCP in Game theory. Topics under game theory start from Introduction, LPP, Bimax games, Lemke's algorithm, Generalization of Lemke's Agorithm.

Participants attending all the sessions and on having completion of assignments in the tutorial will earn a certificate of completion of course on Matrix Analysis and Game Theory with **3** credits.

About MAHE, Manipal

Manipal Academy of Higher Education is synonymous with excellence in higher education. Over 28,000 students from 57 different nations live, learn and play in the sprawling University town, nestled on a plateau in Karnataka's Udupi district. 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-campuses 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 objectives of fostering advanced research and training in the area of Mathematics, Statistics and Applications. It facilitates in bridging the gap between Mathematicians/Statisticians and the Applied Mathematicians working in the area of Health, Technological, and Social Sciences.

Registration Fee

Early Bird Registration Fee : ₹ 5900 (Inclusive of 18% GST) Late Registration Fee : ₹ 6490 (Inclusive of 18% GST) UG/PG students : ₹ 3000 (Inclusive of 18% GST)

MAHE Faculty/Staff/Research scholars : ₹ 5000

Eminent External Speakers

Prof. R. B. BapatISI, Delhi Centre





Dr. Sukanta Pati(tbc)

IIT Guwahati



Dr. Balaji Ramamurthy *IIT Madras*



Prof. S. K. Neogy
ISI, Delhi Centre



Prof. T.E.S. RaghavanUniversity of Illinois, USA

How to apply

tbc = to be confirmed

Delegates may apply by filling out the application form available online https://conference.manipal.edu/magt and the payment can be done through the payment gateway. The registration fee may be paid through the crossed DD drawn in favor of "Manipal University conference/workshop" payable at Manipal or Udupi, and sent the same to the following address: Organizing Secretary, MAGT 2018, CARAMS, Level VI, Health Sciences Library Building, MAHE, Manipal, Karnataka, 576 104 India.

Accommodation

Registration fee includes kit, breakfast, lunch and dinner. A decent accommodation at a guest house/shared flats/hostel/Fortune Inn Valley View will be arranged, on prior request at payment basis. The payment towards the hostel accommodation will be partially/fully bourned by the organizers depends on the fund availability.

Important Dates

Last date for submission of application : November 30, 2018 Early bird payment of registration fee : November 15, 2018

For further details, please visit http://carams.in/magt