

# Applied Linear Algebra, Probability and Statistics (ALAPS 2024)

(Hybrid Mode)

September 28, 2024



A one-day symposium in honor of Prof. C. R. Rao

## About the Symposium

Padma Vibhushan Professor Calyampudi Radhakrishna Rao is one among the great Indian statisticians who received 2023 International Prize in Statistics, which is equivalent to Nobel prize in Statistics. CRR, a legendary statistician, received this prize for his groundbreaking work entitled 'Information and the Accuracy Attainable in the Estimation of Statistical Parameters' published in Bulletin of Calcutta Mathematical Society in 1945. C R Rao, born on September 10, 1920, at Hoovina Hadagali, Karnataka lived a long fruitful life of 102+ years till August 22, 2023.

Center for Advanced Research in Applied Mathematics and Statistics (CARAMS, MAHE) has been organizing events and special sessions in honor of him since 2020, the year it celebrated 'CRR Day' marking Rao's 100th birthday. In the same year, CARAMS organized an international conference ALAPS 2020 (online format) in honor of Rao, where Prof. C R Rao arrived on the screen with the help of his daughter Teja Rao, accepted felicitation, and conveyed his best wishes to his disciples, collaborators, and admirers among the participants. In the following year, CARAMS organized an international conference ICLAA 2021 and an international workshop IWMS 2021 (hybrid format), with common sessions in honor of Prof. Rao. In 2023, a two-days symposium was organized to pay tribute to Prof. Rao and on the same occasion, a book-volume published in honor of Prof. Rao and dedicated to ICLAA 2021 and IWMS 2021 was released.

CARAMS, MAHE will be organizing a one-day symposium on September 28, 2024, in the memory of Prof. Rao. On this occasion, there will be two technical talks by Prof. Arni S R Srinivasa Rao and Prof. S K Neogy, which will be a part of CRR Lecture Series organized by CARAMS, MAHE.

## Invited Speakers



**Arni S R Srinivasa Rao**  
Medical College of Georgia, USA  
and  
Augusta University, USA

**Samir K Neogy**  
Indian Statistical Institute,  
Delhi Center  
New Delhi, India

The objective of the symposium is to connect young scholars and students with Rao's area of work and his achievements. Besides having seminars and technical sessions from eminent scientists in the field, and many student activities refreshing the memories of Rao, scholars and students are also encouraged to present their research work with the theme connected to Rao's work and achievements.

**The theme of symposium shall focus on, but not limited to**

- Theoretical and applied Linear Algebra
- Probability and Statistical Inference
- Applied Statistics (applications in the area of engineering, bioinformatics, medicine, digital signal processing, economics etc.)

and the articles in the above focus area may be submitted for the presentation in the contributory session.

**Venue: MIT KEF R&D Center, MIT, MAHE, Manipal**

## Registration Fee

Foreign delegates: 30 USD

Indian delegates: 500 INR + GST

## Important Dates

Last Date for registration & abstract submission: September 21, 2024

**How to Register?:** Enroll in our portal using the link <http://carams.in/registration> and then go to 'My Page' for further details such as guidelines for online fee payment, uploading of personal information, uploading abstract of talk, and any other relevant information.



**Note:** Participants taking part in the student activities are exempted from the registration fee payment.

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

Associated Departments: Department of Applied Statistics and Data Science, PSPH, MAHE | Department of Mathematics, MIT, MAHE

Convenor: Dr. K. Manjunatha Prasad  
Email: [kmprasad63@gmail.com](mailto:kmprasad63@gmail.com)  
[km.prasad@manipal.edu](mailto:km.prasad@manipal.edu)  
For details: <https://carams.in/>

Mail: [carams@manipal.edu](mailto:carams@manipal.edu)  
[carams.mahe@gmail.com](mailto:carams.mahe@gmail.com)  
Phone: +91 820 2922407

Org. Sec.: Dr. Varun Kumar S G  
Co-org. Sec.: Dr. Arathi K Bhat  
Email: [varung.kumar@manipal.edu](mailto:varung.kumar@manipal.edu)  
[arathi.bhat@manipal.edu](mailto:arathi.bhat@manipal.edu)

Visit us at <https://carams.in/events/alaps2024/>

# Applied Linear Algebra, Probability and Statistics (ALAPS 2024)



## STUDENT ACTIVITIES

September 28, 2024

### About the Symposium

Padma Vibhushan Professor Calyampudi Radhakrishna Rao is one among the great Indian statisticians who received 2023 International Prize in Statistics, which is equivalent to Nobel prize in Statistics. CRR, a living legend, received this prize for his groundbreaking work titled '*Information and the Accuracy Attainable in the Estimation of Statistical Parameters*' published in Bulletin of Calcutta Mathematical Society in 1945. C R Rao, born on September 10, 1920 at Hoovina Hadagali, Karnataka lived a long fruitful life of 102+ years till August 22, 2023.

Center for Advanced Research in Applied Mathematics and Statistics (CARAMS, MAHE) has been organizing events and special sessions in honor of him since 2020. CARAMS, MAHE will be organizing a one-day symposium on September 28, 2024. In order to introduce Prof. Rao's work and achievements to the young minds of the region, student activities and competitions related to the life and works of Prof. Rao are held.

The objective of the symposium is to connect young scholars and students with Rao's area of work and his achievements. Besides having seminars and technical sessions from eminent scientists in the field, and many student activities refreshing the memories of Rao, scholars and students are also encouraged to present their research work with the theme, "**Life and works of Prof. C.R. Rao**".

### The theme of symposium shall focus on, but not limited to,

- Theoretical and applied Linear Algebra
- Probability and Statistical Inference
- Applied Statistics (applications in the area of engineering bioinformatics, medicine, digital signal processing, economics etc.).

The articles in the above focus area may be submitted for the presentation in the contributory session.

## Student Activities

### Quiz Competition

- A college can send a team of 3 members.
- Quiz will have 3 rounds (excluding screening round).
- Questions will be related to basic mathematics and statistics, linear algebra and its applications and C.R. Rao and his life works.



### Collage Making Competition

- A college can send a team of maximum 3 members.
- Theme - **Life and works of Prof. C.R. Rao**.
- Time limit - 1 Hour.
- Only one black colored chart (70×56 cm) will be provided by the organizers. All the other necessary materials like paper, pictures, magazines, glue, scissors, sketch pen/colors etc., are to be brought by the participants.
- Judgement will be based on the content and presentation.



### Oral Presentation

- A college can send any number of students to present their individual works.
- The topics must be related to the theme of the symposium which may include independent work, college projects or any related published works.
- The mode of the presentation (chalk and board/PPT) is left to the participants.
- Time limit: 8 + 2 minutes.
- To avoid last minute discrepancy, participants who use slides are supposed to send their files to [carams.mahe@gmail.com](mailto:carams.mahe@gmail.com) by September 27, 2024.
- Judgement will be based on communication, content/comprehension, and engagement.



### General Instructions

- The judges' decision will be final and should be abided.
- No mobile or internet means would be allowed at the time of competition.
- The prize distribution ceremony will take place during the valedictory session.

**For any queries, contact:** Dr. Varun Kumar S. G. (Organizing Secretary) - +91 9964279418  
Dr. Arathi K Bhat (Co-organizing Secretary) - +91 8660418625

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

Associated Departments: Department of Applied Statistics and Data Science, PSPH, MAHE | Department of Mathematics, MIT, MAHE

Convenor: Dr. K. Manjunatha Prasad  
e-mail: [kmprasad63@gmail.com](mailto:kmprasad63@gmail.com)  
[km.prasad@manipal.edu](mailto:km.prasad@manipal.edu)

e-mail: [carams@manipal.edu](mailto:carams@manipal.edu)  
[carams.mahe@gmail.com](mailto:carams.mahe@gmail.com)  
Phone: +91 820 2922407

Org. Sec.: Dr. Varun Kumar S G.  
Co-org. Sec.: Dr. Arathi K Bhat  
e-mail: [varunsg.kumar@manipal.edu](mailto:varunsg.kumar@manipal.edu)  
[arathi.bhat@manipal.edu](mailto:arathi.bhat@manipal.edu)

Visit us at <https://carams.in/events/alaps2024/>