

Invited Speakers

Prof. Erwan Hingant, France
Prof. Francisco Coelho, Portugal
Prof. Joaquim M C Correia, Portugal
Prof. Marília Pires, Portugal
Prof. Michael Grinfeld, United Kingdom
Prof. Nabil Bedjaoui, France
Prof. Pornsarp Pornsawad, Thailand
Prof. Sangita Yadav, India
Prof. Youcef Mammeri, France

Local Organizing Committee

Prof. Anirudh S Rana	Prof. Ashish Tiwari
Prof. Balram Dubey	Prof. Bhupendra K Sharma
Prof. Chandra Shekhar	Dr. Divyum Sharma
Dr. Gaurav Dwivedi	Prof. Jitender Kumar
Prof. Krishnendra Shekhawat	Prof. P H Keskar
Dr. Pramod Eyyunni	Dr. Rahul Kumar
Prof. Rakhee	Prof. Sangita Yadav
Dr. Shailesh Trivedi	Prof. Shivi Agarwal
Prof. Sumanta Pasari	Prof. Trilok Mathur

For Registration/Queries/Clarifications, Please Contact:

Principal Organizer

Dr. Rajesh Kumar

Department of Mathematics

BITS Pilani, Pilani Campus, Rajasthan-333 031

Phone: +91 1596 515867 (O), **Fax:** +91 1596 244183

Mobile: +91 7740906918

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Please visit following website to complete the Registration Form and for further updates:

<https://sites.google.com/uevora.pt/aesim-birla2023/home?authuser=1>

Alternatively, you can fill the Registration form and email the soft copy to aesim.cimpa.bitspilani@gmail.com by 30th November 2023.

Chief Patron

Prof. V. Ramgopal Rao

Vice Chancellor, BITS Pilani

Patron

Prof. Sudhirkumar Barai

Director, BITS Pilani, Pilani Campus

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Prof. Devendra Kumar, Head

Dept. of Mathematics, BITS Pilani, Pilani Campus

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Prof. Rajesh Kumar, BITS Pilani, Pilani Campus, India

Prof. Joaquim M C Correia, Univ. of Evora, Portugal

Prof. N. Bedjaoui, Univ. of Picardie Jules Verne, France

Scientific Committee

Prof. G D Veerappa Gowda, TIFR Bangalore, India

Prof. Joaquim M C Correia, Univ. of Évora, Portugal

Prof. Michael Grinfeld, Univ. of Strathclyde, UK

Prof. Fernando da Costa, Univ. Aberta, Portugal

Prof. Youcef Mammeri, Université Jean Monnet, France

Prof. Nabil Bedjaoui, UPJV Amiens, France

Prof. Ankik K Giri, IIT Roorkee, India

Prof. Marília Pires, Univ. of Évora, Portugal

Prof. Mani Mehra, IIT Delhi, India

Prof. Neela Nataraj, IIT Bombay, India

Prof. Pornsarp Pornsawad, Silpakorn Univ., Thailand

Call for Oral/Poster Presentation

Interested candidates are invited to submit an Abstract (max. 1 page) of their proposed research topic on or before 10th December 2023. If selected after review, they will be communicated (latest by 12th December 2023) to prepare either 15 minutes oral/poster presentation.



Asian and European Schools in Mathematics (AESIM) School on Mathematics for Health Sciences

Supported by

CENTRE INTERNATIONAL DE
MATHÉMATIQUES PURES ET
APPLIQUÉES (CIMPA)

December 28th, 2023- January 6th, 2024

Organized by

Department of Mathematics
BITS Pilani, Pilani Campus, Rajasthan

About BITS Pilani

BITS Pilani is a multi-campus deemed university with campuses in Pilani, Goa, Hyderabad and Mumbai in India and in Dubai, UAE. BITS Pilani is known for its flexible and modular academic curriculum with strong emphasis on University Industry linkages. BITS Pilani offers innovative dual-degree scheme and has a strong focus on off-campus work integrated learning programmes for working professionals. For more details, please visit, www.bits-pilani.ac.in.



About the Department

The department was established in 1944 as a part of the, then existing Birla Science College, which was incorporated in the BITS Pilani in 1964. The department offers opportunities for the education and research in a wide spectrum of areas in Mathematics such as: Algebra, Analysis, Differential Equations and Applications, Discrete Mathematics, Applied Statistics, Operations Research, Numerical Methods and Applications, Uncertainty Quantification, Cosmology and Relativity.

Aims and Objective of the School

This is an introductory Masters or PhD level school in Applied Mathematics and Scientific Computing, involving many aspects of probabilistic and deterministic modelling to handle world real-life problems in the Health Sciences. In this school, both theoretical and practical aspects of the problems and their solutions will be discussed by providing theory-based lectures and research talks and their applied counterparts in the form of mini-projects that will take place throughout the duration of the school. In addition to this, few

tools and techniques will be explored that would enable us to some understanding of the analytical properties and the numerical solutions of the mathematical equations.

The lectures will be provided by national and international experts. Some important topics include:

- Reaction-Diffusion Advection Equations , Water Wave Models, Waterborn Diseases, Epidemics
- Biology of Blood Coagulation; Smoluchowski and Becker-Doring Equations; Equations of Blood Coagulation
- Numerical Schemes for Hyperbolic PDEs, MATLAB
- Mathematics of Haematopoiesis, Differential Equations for stem cell pool size maintenance
- Cancer biology; models of tumour growth, therapy models; models of therapeutic targets
- Lifetime bone density changes, homogenisation, optimisation with constraints, predictive models of bone density loss

Transportation

Pilani is well connected by road with two metropolitan cities, Delhi and Jaipur. There are direct trains from Delhi Sarai Rohilla Station to Loharu (20 Km away from Pilani). There are direct buses from ISBT Kashmiri Gate, Delhi and Sindhi Camp Bus Stand, Jaipur to Pilani.

Registration Details

Important Dates:

Last date for Registration: November 30th, 2023

Announcement of selected participants: December 5th, 2023

Registration Fee: None

Accommodation: Free

Food: Free

REGISTRATION FORM

AESIM School

December 28th, 2023 - January 6th, 2024

Name:

DOB:.....

Nationality:.....

Highest Qualification:

Designation:

Organization:

Domain of Research:

Mailing Address:

Contact No.:

On-line/On-site:.....

Email:

Accommodation required:.....

For International Participants Only:

Travel Support: (Approx. Cost?).....

Dietary Restriction:

Signature:

Date:

For Visa:

Please consult

<https://indianvisaonline.gov.in/>

<https://indianvisaonline.gov.in/evisa/tvoa.html>