

Speaker Details



Dr. E Natarajan

Professor

Department of Mathematics

**Indian Institute of Space Science and
Technology (IIST)- Thiruvananthapuram**

Focus Topics

Lecture 1: Variational formulations and Galerkin approximations.

Lecture 2: Finite element method for the general elliptic problems

Lecture 3: Construction of basis functions and numerical integration

Lecture 4: Local and Global assembly and the solution to linear systems

Workshop Committee

Honorable Patron

Dr. G. Viswanathan
Chancellor, VIT

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Vice President, VIT

Dr. Sekar Viswanathan
Vice President, VIT

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Convener

Dr. M.S. Jagadeesh Kumar,
HOD, Mathematics, SAS

Organizing Secretaries

Dr. B. Rushi Kumar

Dr. P. Ragukumar



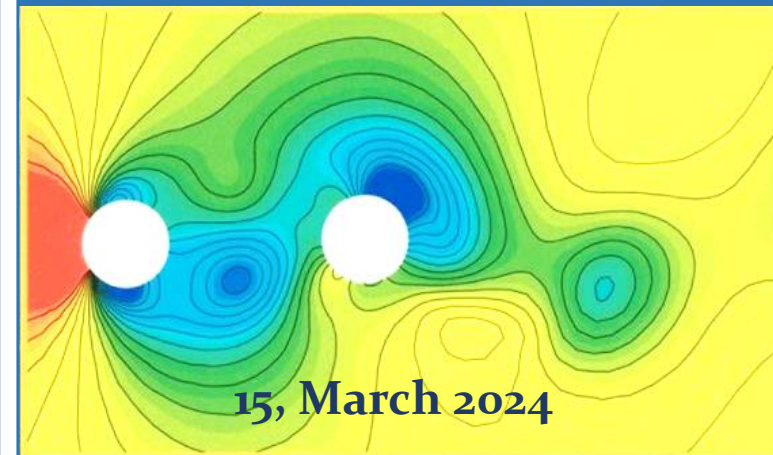
One day Workshop

on

Mastering Finite Element Methods For Fluid Flow Problems

Organized by

**Department of Mathematics,
School of Advanced Sciences (SAS),
Vellore Institute of Technology,
Vellore**



About the Workshop

The one-day workshop on "Mastering Finite Element Methods for fluid flow problems" is designed to provide participants with a comprehensive understanding of Finite Element Methods (FEM) as applied to fluid flow problems. The workshop will cover theoretical foundations, practical implementation, and hands-on exercises using software tools commonly used in the field. Participants will learn how to set up and solve fluid flow problems using FEM, analyze and interpret results, and gain practical insights into best practices and common challenges in this area. The workshop is suitable for researchers, students, and professionals interested in expanding their knowledge and skills in numerical methods for fluid flow analysis.

Target Audience

Faculty members, research scholars and postgraduate students

Certification

e-certificates will be provided to all registered and active participants.

Note: The number of participants is limited to 50 and is on first come first serve basis. There is no registration fee. All confirmed participants are informed to bring their own laptop for hands on session.

About VIT

Vellore Institute of Technology (VIT) was founded in 1984 as Vellore Engineering College by Honourable Chancellor Dr. G. Viswanathan. VIT attracts students from all the states and union territories of India with more than 55 countries due to its academic excellence. The curriculum enables students to think innovatively through applied learning practices. Innovations like Fully Flexible Credit System [FFCS], Project-based Learning [PBL], entirely digitized academic portals and Hackathons assist students in equipping themselves for job skills and kindle their interest and curiosity, thereby molding them to be better problem solvers. VIT has strong tie-ups with Industries as well as to universities of national and international repute. These Memoranda of Understandings provide students with more significant opportunities to pursue higher education in their fields of interest. The national and international clubs and chapters at VIT provide arenas for the students to think out of the box and excel in co-curricular and extra-curricular activities. VIT has been recognized as the "Institution of Eminence" by the Govt. of India and accolades with A++ Grade by NAAC, MHRD, Govt. of India. VIT Information: www.vit.ac.in

Contact

Dr. B. Rushi Kumar

Professor, School of Advanced Sciences

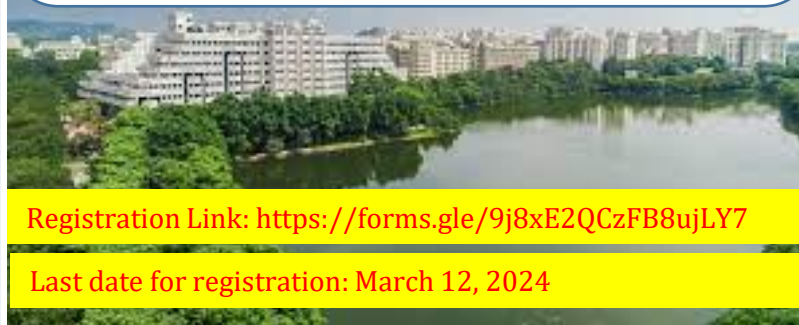
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Registration Link: <https://forms.gle/9j8xE2QCzFB8ujLY7>

Last date for registration: March 12, 2024

About SAS

The School of Advanced Sciences (SAS), established in 1984, is a distinguished center for academic learning at VIT, comprising the Departments of Mathematics, Physics, and Chemistry. SAS is driven by a vision to provide world-class education and research, aiming for global impact. With a collective faculty strength of more than 250, SAS boasts a team of experts with significant research experience. All these departments have been recognized by DST-FIST for their sophisticated instrumental facilities, enhancing the research potential. SAS offers a diverse range of Masters programs. With an unwavering commitment to academic excellence, the School of Advanced Sciences at VIT, Vellore, continues to shape future leaders and innovators in the field of basic science and related domains.

About the Department

The Department of Mathematics at VIT, Vellore, holds a prominent position in the academic landscape, earning a QS World Subject Ranking of 351-400 in 2022, and ranking 11th within India. Recently, the department secured funding for DST-FIST project, further enhancing its research capabilities. The faculty's areas of expertise span a wide spectrum, including algebra, analysis, differential equations, applied mathematics, optimization techniques, statistics, data science, theoretical physics, and computational sciences. The department offers Ph.D. programmes in Mathematics, Statistics and Data Science in addition to M.Sc. (Data Science), M.Sc. (Business Statistics), Integrated M.Sc. (Computational Statistics and Data Analytics) and Integrated M.Sc. (Mathematics) programmes