#### **About the FDP**

Linear algebra is undeniably the base for many fields of sciences such as Machine Learning, Deep Learning, Neural Networks, Supply Chain Management, Digital Signal Processing, Pattern Recognition, to name a few. Thus it has become mandatory for researchers and faculties to revise and be updated with this subject.

This FDP is mainly focused on brushing up the basics as well as bringing out the research being carried out around the globe about the applications in different domains. This FDP will introduce the basics of Linear Algebra at a post graduate level and also showcase applications currently being researched.

Both research scholars and faculties working in the linear algebra and its allied areas are welcome to participate. Highly motivated graduate students will also be permitted to attend.

#### What do we cover in the FDP?

- 1. Matrices, Vector Spaces
- 2. Linear Transformation
- 3. Eigenvalues & Eigenvectors
- 4. Special Matrices
- 5. Decompositions
- 6. Inner Product Space
- 7. Applications in Graphs
- 8. Applications in Linear Complementarity Problems
- 9. Applications in Game Theory

For more details, please visit our website www.vitlaa.in

#### **Resource Persons**



**Dr. T. Parthasarathy**Department of Mathematics
CMI, Chennai



**Dr. Arindama Singh**Department of Mathematics
IIT, Madras



**Dr. K. Manjunatha Prasad**Department of Data Science
MAHE, Manipal



**Dr. K.C. Sivakumar**Department of Mathematics
IIT Madras



**Dr. Biswajit Deb**Department of Mathematics
SMIT, Sikkim



**Dr. P. Vanchinathan**School of Advanced Sciences
VIT, Chennai



**Dr. P. Sushmitha**School of Advanced Sciences
VIT, Chennai

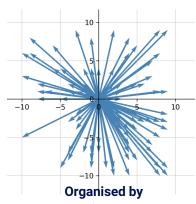


# Faculty Development Program on

# Linear Algebra and its Applications

February 27 - March 03, 2023

### For motivated Research Scholars and Faculty



Division of Mathematics School of Advanced Sciences (SAS) Vellore Institute of Technology, Chennai, INDIA

VIT - A Place to Learn; A Chance to Grow

#### **About VIT**

VIT has made a mark in the field of higher education in India imparting quality education in a multi-cultural ambience. intertwined with extensive application-oriented research. VIT was established with the aim of providing quality higher education at par with institutions of international standards. It persistently seeks and adopts innovative methods to improve the quality of higher education in all fields of science and technology. VIT was established by the well-known educationalist and former parliamentarian, honorable Dr. G. Viswanathan, the Founder and Chancellor, a visionary who transformed VIT into a Centre of excellence in higher technical education. VIT is ranked among the top 601-700 universities of the world and one among the top 3 institutions in India (Shangai ARWU Ranking 2022. It is ranked the 9th best university and 10th best research institution and the 12th best engineering institution in India (NIRF ranking, Govt. of India 2022). Engineering and technology subjects areas of VIT are the 346th best in the world and 9th best in India as per QS university rankings by Subject 2022. It is ranked within the top 200 universities in Asia (QS - Asia University rankings 2022) and has got A++ in the 4th cycle of NAAC accreditation.

# **Vellore Institute of Technology, Chennai**

VIT Chennai is a globally engaged, competitive, comprehensive and research-enriched university campus strategically positioned in the capital city of Tamil Nadu, to respond to major industrial, social, economic and environmental demands and challenges. VIT Chennai is ably spearheaded by Vice Presidents, Mr. Sankar Viswanathan, Dr. Sekar

Viswanathan, Mr. G.V. Selvam, Assistant Vice President Ms. Kadhambari S. Viswanathan, Vice Chancellor Dr. Rambabu Kodali, and Pro Vice Chancellor Dr. V.S. Kanchana Bhaaskaran. They share in the mission to make VIT a global center. The focus is to:

- Maximize the Industrial Connectivity.
- Create Centers of Excellence in niche areas of research.
- Enrich Technological and Managerial Human Capital nurtured in a multicultural ambience.
- Provide a common platform for the agglomeration of ideas of personnel from various walks of life for enriched learning.
- Foster International collaborations for mutual benefits in areas of research.

#### **About the School**

The School of Advanced Sciences (SAS) at VIT Chennai comprises Divisions of Mathematics, Physics and Chemistry. It offers Ph.D. in Physics, Chemistry, Mathematics, Geology, M.Sc. in Physics, Chemistry, Data Science and B.Sc. Mathematics & Computing along with a plethora of core and elective courses facilitating B.Tech., M.Tech., MCA, Management and Law programmes.

☑ Ph.D. - Physics/Chemistry/Mathematics/Geology

☑ M.Sc. - Physics/Chemistry/Data Science

☑ B.Sc. Mathematics & Computing

# Registration

Interested participants must register and make the payment at <a href="https://vitchennaievents.com/">https://vitchennaievents.com/</a> by

selecting the event and appropriate category "Select Club  $\to$  FDP  $\to$  Linear Algebra applications-{Student, Scholar, Faculty}".

	Early Bird	
	on/before	Registration
	Feb 01, 2023	
Faculty	₹1200	₹1500
Research	₹1000	₹1500
Scholars		
UG/PG	₹ 750	₹1000
students		

Last Date for Registration: Feb 25, 2023

Please visit <a href="https://www.vitlaa.in">https://www.vitlaa.in</a> for any updates.

# **Call for Young Scientists**

Complete financial support may be provided for young scientists (highly motivated research scholars), depending on funding availability. Application may be submitted for the same to the convenors.

### Accommodation

Accommodation for the participants will be arranged on payment basis inside the campus, if required. Depending on the funding availability, we may partially/fully waive off the accommodation charges.

# **Convenors**

Dr. David Raj Micheal & Dr. Sushmitha P

Division of Mathematics, SAS, VIT, Chennai

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