

## Short Term Training Programme (STTP) on Matrix Computations

Sponsored by CoE in SIP, SGGS, Nanded.

During February 22- 27, 2021



**Organized by**  
**Department of Mathematics and**  
**Department of Instrumentation, SGGS**  
**Institute of Engineering and Technology,**  
**Vishnupuri,**  
**Nanded, 431606 (MS)**

<http://www.maths.sggs.ac.in>

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**About Workshop:** Matrix computation and Matrix calculus in general have become a prominent area of research in recent days. An important component of this Matrix calculus is Matrix factorization which is used widely in image processing, Big data, machine learning and AI. Recommender systems like Netflix and Amazon and other commerce giants have developed their own MF methods. So, it is the need of time to learn Matrix computation techniques for the new research. In view of introducing new research components at our Center of Excellence CoE-SIP at SGGS we have planned one week workshop in this area. New research scholars, faculty, students and other stake holder will be immensely benefited with this course.

### **Course Content:**

1. How to Minimize computational error?

2. Uses of SVD and QR factorization.

3. Efficient methods for computation of eigenvalues and associated methods (Krylov Subspace method)

### **Speakers:**

1. Prof Harish K Pillai, Department of Electrical Engineering, IIT Bombay.

2. Prof. Madhu Belur, Department of Electrical Engineering, IIT Bombay.

3. Debasattam Pal, Department of Electrical Engineering, IIT Bombay.

### **Organizing Committee:**

1. Dr. Arunkumar R. Patil

2. Dr. Raghunath S. Holambe

### **Who can participate?**

Research scholars, M.Tech, M.Sc. Students, faculty

**Registration Fees:** Rs. 1000/-

### **Important Dates:**

1. Last date for receiving completed registration form: **February 20, 2021.**

2. Declaration of list of selected participants: **February 21, 2021.**

### **Application Form:**

[https://docs.google.com/forms/d/1ujRH\\_kb4AmlsCOGRxas-QcVsE\\_YA3taZuBFdXDj0uaM](https://docs.google.com/forms/d/1ujRH_kb4AmlsCOGRxas-QcVsE_YA3taZuBFdXDj0uaM)