



SHIVAJI UNIVERSITY, KOLHAPUR  
शिवाजी विद्यापीठ, कोल्हापूर

**National Workshop on Linear  
Algebra and its Applications -  
2018**

**28 February- 05 March, 2018**

**Organized by  
Department of Mathematics,  
Shivaji University, Kolhapur**

**Venue  
Ramanujan Hall, Department of  
Mathematics, Shivaji University,  
Kolhapur**

**[www.unishivaji.ac.in](http://www.unishivaji.ac.in)**



**ABOUT UNIVERSITY:**

Shivaji University, established in 1962, is named after the Great Maratha Warrior and founder of the Maratha empire Chhatrapati Shivaji. It was inaugurated on 18th November, 1962 by Dr. Radhakrishnan, the then President of India. One of the major objectives behind foundation of this University was to cater to the regional needs of South Maharashtra Education. The jurisdiction of the University is spread over three districts viz. Kolhapur, Sangli and Satara.

**ABOUT THE DEPARTMENT:**

The Department of Mathematics was established in the year 1964. Department has two Professors and eight Assistant Professors. The department has always updated itself and changed the thrust areas of teaching and research over the years in keeping with the UGC, CSIR guidelines. The Department has its own library, having 4000 books, funded by NBHM. The Department offers M.Sc., M.Sc. Tech.(Mathematics), M. Phil. and Ph. D. Courses.

**OBJECTIVE OF THE WORKSHOP:**

- To help participants to upgrade their knowledge and motivate them to do research.
- To provide a platform to interchange innovative ideas in Linear Algebra.
- To discuss open issues in the area of Linear Algebra and its various applications.
- To bring together researchers/teachers working in different areas of this subject, in order to form possible interdisciplinary collaborations.

**IMPORTANCE AND RELEVANCE :**

Linear Algebra is vital in multiple areas of **science** in general. Because linear equations are so easy to solve, practically every area of modern science contains models

where equations are approximated by linear equations. Also Linear Algebra has, of course, its use in abstract algebra. Vector spaces arise in many different areas of algebra such as group theory, ring theory, module theory, representation theory, Galois theory, and much more. Understanding the tools of linear algebra gives one the ability to understand these theories better, and some theorems of linear algebra require also an understanding of these theories. They are linked in many different intrinsic ways.

Linear Algebra has huge applications in various fields – Linear Programming, Markov Chains, Networking, Geometry, Economics, Differential Equations and many more...

**ELIGIBILITY:**

Students, Research scholars and Faculties familiar in the area of Algebra are preferred.

**RESOURCE PERSONS / SCIENTIFIC ADVISORY  
COMMITTEE**

- Prof. S. G. Dani, Centre for Excellence in Basic Sciences, Mumbai.
- Prof. J. K. Verma, IIT Bombay.
- Prof. S. R. Ghorpade, IIT Bombay.
- Prof. K. N. Raghavan, IISc, Chennai
- Prof. S. A. Katre, S. P. Pune University, Pune
- Prof. Dilip Patil, IISc Bangalore.
- Dr. Shripad Garge, IIT Bombay
- Dr. A. J. Jayanthan, Goa University, Goa
- Prof. Sarang Sane, IIT Madras
- Prof. Kumarasen, University of Hyderabad, Hyderabad
- Dr. Surendra Reddy, Swami Ramanand Teerth Marathwada University, Nanded.
- Dr. Anuradha Garge, Mumbai University.
- Prof. (Mrs.) S. H. Thakar, Shivaji University, Kolhapur

## TOPICS TO BE COVERED

The following are some of the main topics:

- Inner product spaces
- Diagonalization
- Bilinear forms
- SVD, QR, Best approximation
- Canonical forms
- Applications of Linear Algebra

## REGISTRATION FEE

PG Students: Rs. 2000  
Research Students: Rs. 2500  
Academicians /Scientists: Rs.. 3500.

Registration fee includes breakfast, lunch, dinner and kit.

Registration fee is payable through Online payment Gateway  
Shivaji University, Kolhapur.

## IMPORTANT DATES

Last date for receipt of application: 08-02-2018

Notification of Accepted Participants: 10-02-2018

## CONVENER:

- Dr. M. T. Gophane  
Department of Mathematics  
Shivaji University, Kolhapur 416004  
Contact No.: 09420129705  
E-mail:mtg\_maths@unishivaji.ac.in

## PATRONS:

**Prof. (Dr.) Devanand Shinde**

Hon'ble Vice-Chancellor, Shivaji University

**Prof. (Dr.) D. T. Shirke**

Hon'ble Pro-Vice-Chancellor, Shivaji University

## ADVISORY COMMITTEE:

**Dr. Vilas D. Nandavadekar**, Registrar, Shivaji University.

**Shri. Ajit B. Chougule**, Ag. FAO, Shivaji University.

**Prof. (Dr.) P. S. Patil**, Ag. Dean, Faculty of Science and Technology, Shivaji University.

**Prof. (Mrs.) S. H. Thakar**, Head, Department of Mathematics, Shivaji University.

## ORGANIZING COMMITTEE:

Prof. (Mrs.) S. H. Thakar

Dr. M. T. Gophane

Dr. K. D. Kucche

Dr. S. B. Bhalekar

Ms. S. S. Mitragotri

Mrs. J. P. Kharade

Mr. S. S. Kumbhar

Mr. J. P. Bhosale

Mrs. S. K. Kharade

## REGARDING REGISTRATION

**Online Registration is mandatory for all the participants.** Last date for application is **08-02-2018**. Please follow the application process by going to the link

<http://www.unishivaji.ac.in:8080/LoginPage.aspx>

For Online Registration scanned photo of size below 20 kb is mandatory.

Note: Please save your Username and Password to download online certificate.