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SOA, Deemed to be University

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SOA, Deemed to be University
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SOA, Deemed to be University

Financial Advisor
Prof. (Dr) Manas Kumar Mallick
Director, Admissions
SOA, Deemed to be University

Organizing Secretaries
Prof. (Dr.) Jayanta Kumar Dash (HOD)
Prof (Dr.) Sachidananda Sahoo
(Assoc Prof)

Organsing Committee:
Department of Mathematics,
Center of Applied Mathematics and
Computing

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Instruction to Candidates Eligibility

This workshop is open to researchers in college/universities engaged in UG/PG programme. The minimum qualification is a M. Sc / M. Tech / B. E/ B.Tech or equivalent and the candidates have some experience teaching/ research.

Deadline

Interested candidates should send their application in the enclosed Performa, duly forwarded and recommended by the head of the Institution and should reach the conveners by 20th November 2018 at the following mailing address.

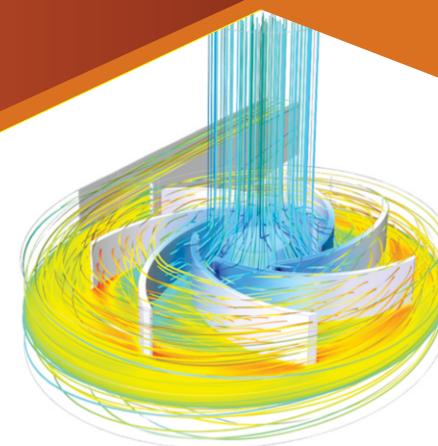
The selected candidates will be informed by 25th November 2018 through email.

Registration: No registration fee

**WORKSHOP
ON**

**Meshfree and Multigrid Methods
Application to PDEs**

27th November, 2018



Organized by



Department of Mathematics
&
Center of Applied Mathematics
and Computing
Institute of Technical Education and Research
Siksha 'O' Anusandhan
(Deemed to be University)
Bhubaneswar, Orissa

Introduction

This workshop intends to introduce two numerical methods, namely, Meshfree method and Multigrid method. In the Meshfree method framework, the spatial differential operators at each particle position are approximated from its surrounding clouds of the particle. The solution methods will be discussed for different Partial Differential Equations (PDEs). The multigrid strategies, which are class of iterative solvers for the solution of the discretized PDEs will also be introduced. The participants will develop the algorithms using Matlab.

Course Contents

- Meshfree Method
- Multigrid Method

There will be a lab session after the lectures.

About the workshop

It is a one-day workshop on Meshfree and Multigrid methods application to PDEs on 27th November 2018. The workshop will be organized by the Department of Mathematics and Center of Applied Mathematics and Computing of Institute of Technical Education and Research, Siksha 'O' Anusandhan (Deemed to be University) Bhubaneswar, Odisha. The purpose of this workshop will be to brainstorm on how to enhance the computational ability among researchers using numerical methods. They can be applied naturally in a time-stepping solution of parabolic partial differential equations, or they can be applied directly to time-dependent partial differential equations. Meshfree and Multigrid methods can also be applied to integral equations, or

for problems in statistical physics. These methods have been successfully applied in several industrial problems.

About SOA (Deemed to be University)

Siksha 'O' Anusandhan (Deemed to be University), located in the temple city Bhubaneswar is well connected to most of the Indian Cities through Rail, Road, and Air. The schools of SOA Deemed to be University have evolved a learning ambiance that is flexible and suitable for dissemination of knowledge in the classroom, laboratories/ workshops, and research in upfront areas.

About Department of Mathematics

The Department offers various programs in Engineering, MCA, M.Sc, and Agriculture. Also, it offers the Ph.D program in various disciplines.

Resource Persons

Prof. (Dr.) Sudarshan Tiwari,
TU Kaiserslautern, Germany

Prof.(Dr.) Satyananda Panda
National Institute of Technology Calicut

NB: For more details regarding this workshop please visit to www.soa.ac.in



APPLICATION FORM

WORKSHOP
ON

**Meshfree and Multigrid Methods
Application to PDEs**

27th November, 2018

Siksha 'O' Anusandhan
(Deemed to be University)

Bhubaneswar, Odisha

Name: _____

Designation: _____

College/University: _____

Educational Qualification: _____

Teaching /Research / Professional
Experience: _____

Address for communication:

Phone (O/R):

Email:

Date

Signature of Applicant

NB: Each participant must provide his/her email id.