

WINTER SCHOOL ON
**STOCHASTIC METHODS FOR UNCERTAINTY QUANTIFICATION
 & SENSITIVITY ANALYSIS OF COMPLEX MODELS**

December 3 - 14, 2018

Indian Institute of Science Education & Research (IISER) Kolkata

The Indo-French Centre for Applied Mathematics (IFCAM) has been jointly set up by the Indian and French Governments at the Indian Institute of Science, Bangalore as an international joint research unit. IFCAM is designed as a platform for cooperation in mathematical sciences with the primary focus being the area of applied mathematics.

IFCAM will be organizing a Winter School (partially supported by DST, India) on “**Stochastic Methods for Uncertainty Quantification & Sensitivity Analysis of Complex Models**”. This workshop aims at familiarizing students with various statistical techniques used to assess the uncertainty and sensitivity of a proposed mathematical model. The target audience will be Masters students and above with basic knowledge in probability and statistics. The topics to be covered in the workshop are:

- **Statistical distributions**
- **Statistical methods for exploring numerical models**
- **Time series analysis**
- **High-dimensional and functional data analysis**
- **Monte-Carlo sampling techniques**
- **Optimization and image processing techniques**
- **Asymptotic statistics**
- **Stochastic processes for machine/deep learning**
- **Statistics in genetics and neuroscience**
- **Statistics for network analysis**

Deadline for applications: **October 21, 2018**

For online registration and other details, please visit:

<http://math.iiserkol.ac.in/ifcam/>



Contact: Department of Mathematics and Statistics
 IISER Kolkata
 Mohanpur-741246, West Bengal, India.
 E-mail: ifcam@iiserkol.ac.in

LIST OF SPEAKERS

- Anirban Banerjee** (IISER-K)
- Analabha Basu** (NIBMG)
- Arnab Chakraborty** (ISI-K)
- Probal Chaudhuri** (ISI-K)
- Koel Das** (IISER-K)
- Anil Ghosh** (ISI-K)
- Bertrand Iooss** (Université de Toulouse & EDF, France)
- Sandeep Juneja** (TIFR)
- Rajeeva L. Karandikar** (CMI)
- Thierry Klein** (Université de Toulouse, France)
- Debasis Kundu** (IIT Kanpur)
- Francois Malgouyres** (Université de Toulouse, France)
- S. P. Mukherjee** (Cal. Univ.)
- Sugata Sen Roy** (Cal. Univ.)
- Shrihari Vasudevan** (IBM Research)

ORGANIZING COMMITTEE

- Asok K. Nanda** (IISER-K)
- Anirban Banerjee** (IISER-K)
- Satyaki Mazumder** (IISER-K)
- Anirvan Chakraborty** (IISER-K)
- Govindan Rangarajan** (IISc)
- Fabrice Gamboa** (Université de Toulouse, France)