

## Uncertainty quantification in Structural Dynamics A Short Course

**Venue:** High speed train research centre, Railway campus, Central South University, Changsha, Hunan, China.

时间: 12月30-31, 1月2-3日

地点: 高速列车研究中心北楼 (图书馆后面) 321

***Instructor: Professor S Adhikari, Swansea University, UK***

Course days	Session 1 14.00 – 15.30	Break 15.30 – 16.00	Session 2 16.00 – 17.30
<b>Day 1</b> 30 Dec 2019	Introduction to Probabilistic methods & Dynamic systems		Stochastic finite element formulation
Course days	Session 1 9.00 – 10.30	Break 10.30 – 11.00	Session 2 11.00 – 12.30
<b>Day 2</b> 31 Dec 2019	Overview of uncertainty propagation		Spectral function method
<b>Day 3</b> 2 Jan 2020	Sensitivity of eigensolutions		Random eigenvalue problem
<b>3 Jan 2020</b>	Random matrix theory - formulation		Random matrix theory – application and validation

***Only the classes on 30 Dec have been changed to afternoon, the other three days are arranged in the morning.***



群名称: Uncertainty quantification  
群号: 875462478

# The Teaching Faculty



**Prof Adhikari (PhD, Cambridge)** is the Chair Professor of Aerospace Engineering at the College of Engineering of Swansea University. He Received the Wolfson Research Merit Award from the Royal Society (UK academy of sciences). He was an Engineering and Physical Science Research Council (EPSRC) Advanced Research Fellow and winner of the Philip Leverhulme Prize in Engineering (given to an outstanding scholar under the age of 35). He obtained his Ph.D. in Engineering at the Trinity College of the University of Cambridge. He was a lecturer at the Bristol University and a Junior Research Fellow in Fitzwilliam College, Cambridge. From 2015 he has been a Distinguished Visiting Professor at the University of Johannesburg (South Africa). He was a visiting Professor at the University of Paris East (France), Carleton University (Canada) and a visiting scientist at the Los Alamos National Laboratory (USA).

Professor Adhikari's research stands on three fundamental footings - structural dynamics, probabilistic methods and computational mechanics. His research works use these basic principles to understand cutting edge multiscale and multidisciplinary problems in applied science and engineering. He has published 4 books, 270 peer-reviewed journal papers, and 175 conference papers. He is one of the most cited researchers in his field (over 9600 citations with h-index=52 in Scopus). Professor Adhikari is a Fellow of Royal Aeronautical Society (FRAeS) and the member of the AIAA Non-Deterministic Approaches Technical Committee (NDA-TC). He is a member of the editorial board of several journals such as: Computers and Structures, Probabilistic Engineering Mechanics, Advances in Aircraft and Spacecraft Science and Journal of Sound and Vibration.

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