

# Modelling in Nuclear Science and Engineering 2018

“Advancing certainty to reduce risks and costs”

## Latest Programme

17 October 2018

Hilton Hotel, One Piccadilly Place, Manchester, M1 3DG

Time	Agenda	Presenter
09:00 – 09:50	Registration and networking	
09:50 – 10:00	Welcome	<i>Chair:</i> Moji Moatamedi <b>International Society of Multiphysics</b>
<b>10:00 – 11:20</b>	<b>Keynote talks: Government Policies and Regulations</b>	
10:00 – 10:25	BEIS Thermal hydraulics project	Carolyn Howlett <b>Fraser-Nash Consultancy</b>
10:25 – 10:50	A UK Regulatory perspective on “Computational Fluid Dynamics” (CFD) for Nuclear safety analysis	Jonathan Downing, John Jones, Ali Tehrani <b>Office for Nuclear Regulation</b>
10:50 – 11:20	Discussion Session	<i>Chair:</i> Ali Tehrani <b>Office for Nuclear Regulation</b>
11:20 – 11:40	Refreshment break, networking and poster session	
<b>11:40 – 12:40</b>	<b>Session 1: Application of Modelling in Risk Analysis</b>	<i>Chair:</i> Paul Smith, <b>Wood</b>
11:40 – 12:00	Challenges in developing safety analysis models of the EU tritium breeding modules for the ITER Fusion Project	Andrew Grief <b>Wood</b>
12:20 – 12:40	Development and application of risk oriented accident analysis methodology for Nordic BWR sever accident management	Sergey Galushin, Dmitry Grishchenko, Pavel Kudinov <b>KTH, Sweden</b>
12:00 – 12:20	Virtual engineering	John Lillington <b>Wood</b>
12:40 – 13:40	Lunch, networking and poster session	
<b>13:40 – 14:40</b>	<b>Session 2: Data Assimilation and Uncertainty</b>	<i>Chair:</i> Fiona Rayment, <b>NIRO</b>
13:40 – 14:00	Selective application of the method of Propagation of Uncertainty to determine Safety Margins to a High Level of Confidence	Edmund Jones <b>Imperial College London</b>
14:00 – 14:20	Data Assimilation Techniques applied to Reactor Analysis	Jonathan Dixon <b>University of Cambridge</b>
14:20 – 14:40	Higher-Order Predictive Modelling of Coupled Multiphysics Systems with Applications in Nuclear Science and Engineering	Dan Cacuci <b>Bangor University</b>
14:40 – 15:00	Refreshment break, networking and poster session	
<b>15:00 – 16:00</b>	<b>Session 3: Validation and Verification</b>	<i>Chair:</i> Chris Pain, <b>Imperial College London</b>
15:00 – 15:20	Reactor core analysis: Past and Future	Paul Bryce <b>EDF Energy</b>
15:20 – 15:40	Verification and validation of ANSWERS software	Paul Smith <b>Wood</b>
15:40 – 16:00	Material Transport in Water Cooled Reactor Systems and Formation of Fuel Clad Crud	Jim Henshaw <b>NNL</b>
<b>16:00 – 16:15</b>	<b>Wrap up and thank you</b>	<i>Chair:</i> Fiona Rayment, <b>NIRO</b>

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