



INFORMATICS COLLOQUIUM

Speaker:

Sean A. McKenna, Senior Research Manager, IBM Research Dublin

Big Data and Predictive Models for the Natural and Urban Environment

Abstract:

Natural resources are becoming increasingly constrained as the global population increases. Rapid developments in instrumentation and interconnectedness provide the ability to better manage resources in both real-time and for long-term planning. This increasingly dense intersection of the digital environment with the natural and built environments provides a number of challenges for the collection, management and use of Big Data as well as for the development and application of predictive models that can utilize these data. Several example applications including water distribution, renewable energy and ocean circulation will be presented. A number of outstanding challenges for data management, predictive analytics and the merging of data-driven and physical process models will be highlighted.

Bio:

Dr. Sean McKenna is Senior Research Manager at the IBM Research Dublin Laboratory, Smarter Cities. He leads a team of scientists and engineers in applying cognitive computing techniques to solve problems in natural resources management, renewable energy supplies and infrastructure systems. Solution techniques include computational and data-driven approaches to take advantage of increasing amounts of sensor data in combination with physical models. Prior to joining IBM Research in November, 2012, Dr. McKenna was a Senior Scientist at Sandia National Laboratories in Albuquerque, New Mexico. Dr. McKenna has over 25 years of experience in science focused engineering. He holds BA, MS and PhD degrees from Carleton College, the University of Nevada and the Colorado School of Mines, respectively. He has previously been an adjunct/visiting faculty at the University of Texas, National University of Singapore, the University of New Mexico and New Mexico Tech.

<i>Date and time:</i>	<i>Monday, May 23, 2016, 11.00 am</i>
<i>Location:</i>	<i>Pérolles II, room A230, Bd de Pérolles 90, Fribourg</i>
<i>Contact person:</i>	<i>Prof. Philippe Cudré-Mauroux</i>

The colloquium is free and open to the public.