



YCCSA Seminar Series Autumn 2017

An interdisciplinary seminar series hosted by the York Cross-disciplinary Centre for System Analysis aimed at researchers from all disciplines

Not to be sniffed at: from electronic noses to AI and metabolomics

Professor Jesús Jorge Brezmes Llecha

Universitat Rovira i Virgili, Spain

24 November, 2017

Ron Cooke Hub, RCH/204 at 13:30

Abstract:

Nowadays, science and technology are becoming more interdisciplinary than ever. As technology advances, scientific studies produce huge datasets that need to be converted into useful information, sound conclusions or reliable systems. In the end, any study or technical development is objectively described by a set of variables with values for each experiment, sample, or trial.

Professor Brezmes will describe the evolution of his own research during his professional career. Starting with a degree in Telecom Engineering, with a final degree project focused on fiber optic laser stability, he went on to obtain his PhD in chemical engineering. He will tell the story of the boom in electronic olfactory systems in the 90's and how he dealt with chemical sensor data from such systems using multivariate analysis, pattern recognition and artificial neural networks to produce working prototypes. With the same holistic approach of using all available data derived from experimental measurements, he will explain how he is now converting huge amounts of experimental data into useful clinical information.

He will give his personal glimpse of the future of data science and how the now all-digital world, with large amounts of datasets are revolutionizing the Artificial Intelligent field and their limitless applications on areas where they can actually perform better than traditional approaches through deep learning techniques based on machine learning and neural network paradigms.

The seminar includes a refreshment break

***Ron Cooke Hub is on Heslington East Campus – accessible by free bus services
Nos. 66 and 44 running at frequent intervals from Heslington West.
The YCCSA Seminar room is on the second floor***