## The **sigma** North West and North Wales Hub is holding a *Mathematics and Statistics Support Networking Event* at Liverpool John Moores University on Thursday 25<sup>th</sup> June 2015, starting at 12:30pm.

This event is aimed at those who would like to network with other Mathematics and Statistics support practitioners, share good practice and discuss common issues. This is an ideal opportunity for Institutions to meet up and share experiences and advice.

12:30 - Lunch

13:00 - Introduction by Professor Peter Byers – Pro-Vice-Chancellor (Education) at Liverpool John Moores University

13:15 - Professor Tony Croft - Professor of Mathematics Education at Loughborough University and **sigma** Director

## The sigma network - a network working!

Over the last few years, the **sigma** network of academic and support staff working in the field of mathematics, statistics and numeracy support has gone from strength to strength. Through the pooling of resources, expertise, and experience those working in this strong community are able to offer much needed help to students from all disciplines and at all levels and thereby address an urgent national priority of improving the quantitative skills of undergraduate and postgraduate students. This talk will highlight the value and benefits of working with the **sigma** network and the opportunities for others to become involved.

13:45 - Dr Alun Owen - Institute of Science and the Environment, University of Worcester

#### **Offering university-wide statistics support**

This talk will first review the issues and challenges associated with offering statistical support services to students across a wide range of university discipline areas. It will then move on to showcase resources currently available and others being developed and use these to illustrate some of these issues and challenges.

#### 14:15 - Refreshments

14:30 - Michael Grove - Director of the STEM Education Centre at the University of Birmingham

# Using data effectively to enhance mathematics support provision

Mathematics and statistics support services are used by learners

from a variety of backgrounds and disciplinary areas. Collecting data and evidence on usage and impact can be used to greatly enhance the overall effectiveness of these services and their visibility across an institution. This talk will review the types of data that might usefully be collected and highlight tools, techniques and strategies for doing so. It will also highlight how those working in mathematics and statistics support might embed a scholarly element to their practice through the collection and dissemination of findings arising from their work.

15:00 – Dr Mark Taylor – Senior Lecturer in Computing and Mathematical Sciences at Liverpool John Moores University

## How to make mathematics unintelligible

Students attending mathematics learner support sessions have raised a number of issues regarding why mathematics can be difficult to understand. Some of these include: describing a mathematical concept using unfamiliar terms; use of unfamiliar mathematical symbols (e.g. Greek symbols); use of unfamiliar mathematical abbreviations (wrt, st, iff, etc.); lack of use of examples or use of unfamiliar examples; lack of use of diagrams or pictures; lack of use of simple analogies; and always explaining a mathematical concept in exactly the same way (regardless of whether the students understand the explanation). Students may have different issues as to why mathematics can be difficult to understand. A few simple changes to the presentation of mathematical concepts can make such easier to understand.

15:30 – Opportunity for network and further discussion

16:00 - Close