

# FME'2001 TUTORIAL PROPOSAL

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**Title of Tutorial:** Modelling for Formal Methods

**Subtitle:** Conceptual Mathematics and model-theoretic languages/methods such as B, VDM, Z

**Synopsis:** A one day foundation course on conceptual mathematics (from category theory to topos theory) and its use in abstract modelling. No prior knowledge of category theory is required.

**Who should attend:** Anyone interested in the learning how to apply category theory and topos theory for the purposes of abstract modelling.

## The Lecturers:

Mícheál Mac an Airchinnigh is a Senior Lecturer in Computer Science at the University of Dublin, Trinity College and founder of the Irish School of the VDM. He teaches *Conceptual Mathematics* to first year undergraduate students in the Information and Communications Technology degree course and *Modelling with the VDM* to fourth year undergraduate students in the Computer Science degree.

Andrew Butterfield is a Lecturer in Computer Science at the University of Dublin, Trinity College.

Arthur Hughes is a Lecturer in Computer Science at the University of Dublin, Trinity College.

## Materials:

F. William Lawvere and H. Schanuel. *Conceptual Mathematics*, a first introduction to categories, Cambridge University Press, 1997.

M. Mac an Airchinnigh, Andrew Butterfield, and A. Hughes. *Lecture Notes on Conceptual Mathematics and Modelling for Formal Methods*, Department of Computer Science, University of Dublin, Trinity College, 2000.