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Mathematics in Engineering and Industry

Mathematics in the digital age – using an online classroom to engage, enthuse and enlighten

Day 1 – Parallel III (16.00-16.30)

Advances in technology often happen much more quickly than associated developments in pedagogy and resources. Online classroom software is an example of this. The software itself is developing at pace and there are now many products available, but evidence of good pedagogy and resources are not so abundant.

Over a number of years, educational charity Mathematics in Education and Industry (MEI) has developed techniques to use online classroom software to deliver tuition, revision, enrichment and professional development. Tens of thousands of students and thousands of teachers have attended MEI online sessions and it is this experience that will be reflected upon. Although this work has predominantly taken place in 16-19 education, there is much overlap with techniques and approaches to facilitating teaching and learning that could be used in a university context.

General techniques, as well as mathematics-specific techniques will be detailed. Online classroom software enables the needs of individuals and diverse groups to be met. The software used by MEI is Blackboard Collaborate. Many of its features are common to most other online classroom software. Thus discussion of instant chat, polling, shared applications, use of breakout rooms and recording of sessions, will be applicable for those with access to different online classroom software.