
MathFest 2014
Prizes and Awards



Portland, Oregon
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August 7, 2014

Annie and John Selden Prize

In November 2004, the MAA Board of Governors approved the Mathematical Association of America's Annie and John Selden Prize for Research in Undergraduate Mathematics Education honoring a researcher who has established a significant record of published research in undergraduate mathematics education and who has been in the field at most ten years. The prize is designed to be an encouragement to such researchers and at most one is awarded every other year.

Matthew Inglis

Dr. Matthew Inglis completed his PhD in mathematics education in 2007. His first publication in undergraduate mathematics education was in 2005 – “La fuerza de la aserción y el poder persuasivo en la argumentación en matemáticas” – published in *Revista EMA: Investigación e Innovación en Educación Matemática*. In 2003, during his first year as a doctoral student, he published an essay – “Three Worlds and the Imaginary Sphere”, in *For the Learning of Mathematics*. In the past nine years, Dr. Inglis has published an astounding number of papers (33) in peer-reviewed journals, and has an additional 2 papers in press. His publications include 3 in the *Journal for Research in Mathematics Education* and 5 in *Educational Studies in Mathematics*, widely acknowledged as the two elite journals in the discipline. Some of his other publications appear in equally prestigious general education and cognitive psychology journals.

Dr. Inglis has advanced our thinking of mathematical argumentation by integrating theories from mathematics education, psychology and philosophy. In a 2008 paper for *Educational Studies in Mathematics*, he explored the

complexity of what it means to be persuaded by an argument using student interviews to illustrate how an individual's judgment on the persuasiveness of an argument depends on the context in which the question was asked, a crucial point for those investigating students' proof schemes. In three papers for the *Journal for Research in Mathematics Education* he used a method from cognitive psychology – eye-tracking – to explore how mathematics majors and mathematicians read proofs.

Dr. Inglis has notably contributed to the field by drawing on a wide range of sources for his theories and methodologies, including psychology and philosophy. Further, he is recognized for insisting on rigorously testing the hypotheses that he and others generate, and was publically recognized by the editorial team of the *Journal for Research in Mathematics Education* for his and his co-authors' conduct as a model for how the field should share data and contest data interpretations.

Response From Matthew Inglis

Given the high esteem in which I hold earlier winners, I am honoured and delighted to be awarded this year's Selden Prize. I would like to thank those colleagues who supported me during the early stages of my career, notably Adrian Simpson and Derrick Watson at Warwick, and Charles Crook and Mike Sharples at Nottingham. I am also extremely grateful to my collaborators and students in the MEC's Mathematical Cognition Group, especially Lara Alcock, Camilla Gilmore and Ian Jones, who have made Loughborough such an enjoyable place to work. Finally, I would like to offer my appreciation to the whole US-based RUME community for running such stimulating and friendly conferences, and for being so welcoming to outsiders like myself.

Biographical Note

Matthew Inglis is a Senior Lecturer and Royal Society Worshipful Company of Actuaries Research Fellow in the Mathematics Education Centre at Loughborough University in the UK. He was educated at the University of Warwick, where he was awarded a BSc, MSc and PhD. During his doctoral work he investigated undergraduate students' understanding of conditional logic, and was supervised by Eddie Gray and Adrian Simpson. After graduating, Dr Inglis took up a postdoctoral fellowship at the Learning Sciences Research Institute at the University of Nottingham, where he remains an Honorary Research Fellow. In 2008 he moved to Loughborough University, where he conducts research on a variety of topics in mathematical cognition. Dr Inglis has received a number of grants to support his work from funding bodies including the Royal Society, the Economic and Social Research Council, the Nuffield Foundation and the British Academy.