School of Mathematics and Statistics

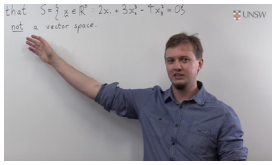
June 2017 Mathematics Teachers Professional Development Day Presenter Biographies

David Angell
Teaching proof
Discovering proofs

David Angell is an Associate Lecturer in pure mathematics at UNSW Sydney with interests in number theory and discrete mathematics, and has published articles in the Journal of Number Theory and the American Mathematical Monthly. He has given extension talks to secondary students for many years in association with MANSW, and at Oxford for the Further Mathematics Support Programme (UK). He has conducted string orchestras (notably the Bourbaki Ensemble), chamber orchestras and full symphony orchestras in Australia and the UK.

Peter Brown
Overview/Vectors and geometry

Peter Brown is a Senior Lecturer in Pure Mathematics and was Director of First Year Mathematics at UNSW between 2011-2016. In addition to the usual academic activities, he has worked with HSC marking and setting for many years and has taken a keen interest in curriculum issues. Peter is very passionate about Mathematics and has given many talks to teachers and students over many years as well as running a number of Mathematics Enrichment Clubs. He is co-author of the Cambridge ICE-EM series of Mathematics textbooks for Years 7-10 and the online-modules helping teachers to understand aspects of the senior mathematics curriculum.



Joshua Capel
Vectors, lines and projectile motion

Joshua Capel gained his PhD in 2014 from the School of Mathematics and Statistics at UNSW Sydney where he is now an Associate Lecturer. He has been instrumental in the recent development of online tutorials and other technology to assist teaching for the School's large first and second year courses.

Diana Combe
Simulations of random variables including the binomial/Simulations and digital technology

Diana was born in Sydney. She completed her honours maths degree at the University of Sydney before leaving for London where she completed her M.Sc in History and Philosophy of Science and Mathematics at Chelsea College, University of London. After several years teaching mathematics at an English High School and then working in a research capacity as statistician in the obstetrics unit of the St Mary's Hospital, Praed St, (London) she returned to Sydney - teaching mathematics and statistics at several Universities before returning to the University of Sydney to complete her PhD in mathematics studying with Don Taylor. Since 2000 she has been lecturer in the statistics department at UNSW Sydney.

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Catherine Greenhill
Networks and Paths

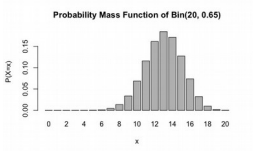
My research interests lie at the intersection of combinatorics, probability and theoretical computer science. I study fundamental questions in asymptotic, probabilistic and algorithmic combinatorics. My work has been applied by researchers in many areas such as physics, computer science, statistics and cryptography. I was awarded the 2015 Christopher Heyde Medal for Pure Mathematics by the Australian Academy of Science, jointly with A/Prof Scott Morrison of ANU.

Jonathan Kress
Differential equations, direction fields and modelling

Jonathan Kress is a senior lecturer and the Director of First Year Studies in the School of Mathematics and Statistics at the UNSW Sydney. Between receiving his PhD in mathematics on electromagnetic fields around blackholes and arriving at UNSW in 2001 he worked on modelling solar magnetic fields at the Univerisity of Sydney and superintegrable systems at University of Waikato. He has always had a keen interest in how, what and why people should study mathematics.

Daniel Mansfield
Critical Path Analysis and the Max-flow/Min Cut Theorem

Dr. Daniel Mansfield is an Associate Lecturer in the UNSW School of Mathematics and Statistics. As a former engineer, he came to UNSW to study a PhD in Mathematics. Subsequently, Daniel has developed a research interest in Ancient Babylonian mathematics, and has received a Vice Chancellor's Teaching Award for Teaching Excellence. He enjoys long walks on the beach and creating online courses for teachers.



Donna Salopek
Simulations of random variables including the binomial
Simulations and digital technology

Donna Salopek is a Senior Lecturer in the Department of Statisics in the School of Mathematics and Statistiscs at UNSW Sydney.