Abstracts

David Bedford

Tales of Ants, Bricks, Bugles, Barrels and Infinity.

In this talk we will look at what mathematicians mean by infinity and present some of the counter-intuitive (and hopefully entertaining) consequences of this approach. You will be introduced to a very persistent ant, a rather surprising bugle, a barrel containing infinitely many balls and a pile of bricks!

David has been a mathematics lecturer for 20 years and has been actively involved in Outreach activities. He has given numerous talks to school children of all ages. Above all he is an enthusiast who likes to inflict his enthusiasm for mathematics on as many people as possible. David has 3 wonderful children (out of 5).

Kristin Coldwell

Prove It!

This workshop on proof includes some fun proofs, some fallacious proofs, some classic proofs and some proofs yet to be found.

Martin Griffiths

Functions in Two, Three and Four Dimensions

Renee Luthre

Using quantitative methods to study social problems

What do suicide, poverty, and divorce all have in common? They are all social problems that sociologists have long studied using quantitative methods. What are the main individual and social determinants of these outcomes? How do society wide changes in suicide, poverty, or divorce relate to individual life chances? Using the results of three landmark studies, we will

examine how quantitative methods helps us to see how private troubles become public issues, and how public issues cause private troubles.

Ben Sparks

The Sacred Geometry of Chance

In his Nineties song Shape of My Heart, Sting sang about a gambler finding beauty in the “hidden laws” of probability that govern poker. Mathematician and musician Ben Sparks deals the cards to investigate, and uncovers some surprising hidden laws – then goes on to find what really makes “numbers dance”. And he’ll show why emotion, art and mathematics can go hand in hand despite the stereotypes.