



BCS Wiltshire Branch

&

The Institute of Mathematics and its Applications
Joint Event



"How much Mathematics does an Internet user use?" Speaker: Professor James Davenport

Certainly hundreds, and possibly thousands, of millions of people use the Internet. How many of them realise how much mathematics is involved in transactions that they all take for granted, from Internet shopping & banking to using Google? In this talk we will look at two examples of the underlying mathematical technology that is in such daily use. We will explain how the Diffie-Hellman process, based on the relatively simple piece of mathematics known as discrete logarithms which makes Internet shopping and banking possible. How does Google rank the millions of possible pages that match what you type in? While the details, particularly the anti-manipulation devices, are complex and often secret, we will explain the basics, and why Google's "I'm feeling lucky" really means "I believe in eigenvectors".



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James Davenport is Hebron & Medlock Professor of Information Technology at the Department of Computer Science at the University of Bath. He is educated at Cambridge (BA 1974, PhD 1980) and has worked for the Research Councils, CAP Group, IBM, and taught at many European universities. He has been at Bath since 1983 and written "Integration of Algebraic Functions" (English and Russian) and "Computer Algebra" (French, English and Russian), and edited several proceedings and published nearly 100 scientific papers.

Tuesday 16th March 2010

18:30 - 20:00

(talk will start at 7pm)

Phoenix Theatre,
New College, Queens Drive,
Swindon

The event is free and open to
non-BCS / IMA members.
Light refreshments will be provided.



*An essential event for IT Professionals &
Mathematicians*

Register on-line via:

<http://www.wiltshirebcs.org/EventsFuture.asp>

Please register by: Thursday 11th March 2010

