

# Bristol Algorithms Days 2007

## Feasibility Workshop

18 – 20 February 2007

The aim of BAD'07 is to gather researchers and students interested in the study of theoretical and practical aspects of algorithms.

This workshop is funded by "Bridging the Gaps", an EPSRC-funded initiative to set up an environment that nurtures interdisciplinary working, with the aim of developing new collaborative research programmes at the interface between mathematical sciences, information and computing technology and engineering.

### Monday 19th February (9.30-12.20, Session Chair: Professor Michael Bender)

Time	Speaker	Institution	Title
9.30-10.30am	Professor S. Muthu Muthkrishnan	DIMACS (Rutgers University) and ATT Research	Algorithmic Theory of Sparse Approximation Problems
10.50 - 11.20am	Dr Alexander Tiskin	University of Warwick	Faster subsequence recognition in compressed strings
11.20 - 11.50am	Dr Veli Makinen	University of Helsinki	Implicit Compression Boosting with Applications to Self-Indexing
11.40 - 12.20pm	Professor Iain Stewart	University of Durham	Bounded pathwidth duality and uniform constraint satisfaction problems

### Monday 19th February (1.30-3.30, Session Chair: Dr David Manlove)

Time	Speaker	Institution	Title
1.30-2.30pm	Professor Michael Bender	SUNY, New York	An Adaptive Packed-Memory Array
2.30-3.00pm	Dr David Meredith	Goldsmiths, University of London	Point-set algorithms for pattern discovery and pattern matching in music
3.00-3.30pm	Dr Colin Campbell	University of Bristol	Probabilistic Approaches to Unsupervised and Semi-supervised Learning

**Tuesday 20th February (9.00-12.20, Session Chair: Dr Prudence Wong)**

Time	Speaker	Institution	Title
9.00-10.00am	Professor Richard Jozsa	University of Bristol	An introduction to quantum computation and some principal achievements
10.00-10.30am	Dr Aram Harrow	University of Bristol	Random walks and quantum search
10.50-11.20am	Saverio Caminiti	University of Rome "La Sapienza"	Combinatorial Mappings between labelled trees and strings
11.20-11.50am	Dr Kostas Tsichlas	University of Patras	Turning Amortized to Worst-Case Data Structures: Techniques and Results
11.50-12.20pm	Dr David Manlove	University of Glasgow	Popular matchings in the Weighted Capacitated House Allocation Problem

**Tuesday 20th February (1.30-3.30, Session Chair: Dr Inbok Lee)**

Time	Speaker	Institution	Title
1.30-2.00pm	Dr David Leslie	University of Bristol	Theory of Multi-agent Learning Algorithms
2.00-2.30pm	Dr Prudence Wong	University of Liverpool	Energy Efficient Online Deadline Scheduling
2.30-3.00pm	Dr Ely Porat	Bar-Ilan University	Approximate String Matching with Address Bit Errors