# Ninth International Symposium on Communication Theory and Applications (ISCTA '07) 15th - 20th July, 2007, Ambleside, Lake District, UK

# **First Call for Papers**

A major objective of the Symposium will be to pursue the progression from communication and information theory through to the implementation, evaluation and performance of practical communication systems of various types. You are invited to submit original papers in the following and related areas:

## **Digital Transmission and Recording**

Source and Channel Coding Modulation, Detection, Channel Estimation Channel Modelling, Synchronisation Optical and Magnetic Recording

#### Special Topics in Channel Coding, Source Coding, Information Theory

Turbo Codes, Low Density Parity Check Codes Source Coding and Data Compression Privacy, Secrecy and Security Multi-Functional Coding Sequences and Arrays Fountain, LT, etc. codes

## **Detection Techniques**

Vector Detection, Multiuser Detection Combined Equalisation, Decoding and Channel Estimation Iterative (Turbo) Schemes

# **Broadband Techniques**

Ultra Wideband Fixed Wireless Access

Bahram Honary (UK)

Michael Darnell (UK)

Lina Fagoonee (UK)

Garik Markarian (UK) Valdemar da Rocha (Brazil)

Izzat Darwazeh (UK)

Javier Garcia-Villalba (Spain)

Peter Hill (UK)

# **Space-Time Techniques**

Information-Theoretic Aspects, Channel Capacities Space-Time-Coding, Signal Constellations Spatial Spreading, Linear Dispersion Codes MIMO Detection and Channel Estimation MIMO Precoding, Writing on Dirty Paper Time Reversal

#### Systems, Multiple Access, Protocols

Communication System Architectures 3G and Beyond-3G Wireless Communication Systems Sensor Networks Ad Hoc Networks Multiple Access Techniques, Protocols Multimedia Networking, wireless e-learning, e-commerce and e-health

#### Realisation

DSP for Communication Systems MIMO Demonstrators Complexity Considerations Implementation of LDPC decoders

**Fusion of Communication and Location** GNSS-based Probabilistic algorithms Applications

The deadline for the submission of papers for consideration is Friday 2nd March, 2007. Papers should not exceed 6 pages in length, including figures. Please submit your paper to:

Professor Bahram Honary Department of Communication Systems Lancaster University Lancaster LA1 4YR UK **Tel:** +44 (0) 1524 510398 **Fax:** +44 (0) 1524 510493 **E-mail:** <u>b.honary@lancaster.ac.uk</u> or Professor Rolando Carrasco School of Electrical, Electronic and Computer Engineering University of Newcastle upon Tyne NE1 7RU, UK Tel: + 44 (0)191 222 7332 Fax: +44 (0)191 222 8180 E-mail: r.carrasco@ncl.ac.uk

You will be notified of acceptance by 20th April, 2007. There will then be an opportunity to revise your paper, taking into account any comments by the referees, and to put it into the required format for the Symposium Proceedings. The deadline for receipt of your revised paper is 18th May, 2007.

#### **Organising & Program Committee**

Mario Blaum (USA) Pingzhi Fan (PR China) Eric Gabidulin (Russia) Jurgen Lindner (Germany) Robert McEliece (USA) Ismael Soto (Chile) Han Vinck (Germany) George Kolev (Russia) Rolando Carrasco, UK (Technical Chair) Paddy Farrell (UK) Lajos Hanzo (UK) Shu Lin (USA) Jorge Pereira (Belgium) Martin Tomlinson (UK) Tad Wysocki (Australia) Nigel Wall (UK)

The Symposium Venue is St. Martin's College, Ambleside, Cumbria, UK, where all the presentations, most meals, and social events, will take place. Ambleside is in the famous and very beautiful English Lake District, and there will be opportunities for walks and excursions during the Symposium.

For information on registration fees and accommodation, please consult our website: http://www.hwcomms.com/iscta07.htm or http://www.dcs.lancs.ac.uk









