



Proposal to the BoG of the IT Society:

IEEE Information Theory Workshop 2010,

30th August till 03rd September 2010 in Dublin, Ireland.

An application for full or partial technical and financial sponsorship is requested from the IEEE IT Society. The proceedings will be included in IEEE Xplore.

About Dublin:

Dublin, the capital of the Republic of Ireland, is built on the River Liffey and has a population of approximately 3.9 million people. It is situated beside the sea, and close to the countryside and mountains. The rest of the country is easily accessible by car, train, or bus. Ireland, with its beautiful scenery, offers a range of attractions to the tourist including ancient archaeological sites and monuments, a variety of sporting activities such as fishing, riding and golf, as well as traditional dancing and music.

A city of fine Georgian buildings, Dublin has been influenced by its Danish, Norman and English antecedents. It has excellent shops, museums, antique shops and a range of pubs and restaurants. It has four major theatres, including the world famous Abbey theatre, concert

facilities, art galleries and cinemas. There is a wide variety of sporting facilities including golf courses and sailing, as well as racecourses.

For more information about Dublin visit: <http://www.visitdublin.com/>

Demographics:

The population of Ireland is currently approximately 5.6 million, with approximately 3.9 million living in the Republic and 1.7 million living in Northern Ireland. The island of Ireland enjoys a rich diversity of ethnic groups and cultures and there is a dominance of young people - over half the population is under 30 years old.

Climate:

Mild and temperate (showers can occur any time of the year.)
Summer temperatures range from 15-25 degrees Celsius (60-75 F)
Spring and autumn temperatures average around 10+ Celsius (50+F).
Winter is 0 to 10 Celsius (30 to 50 F).

Scientific community in Ireland:

Ireland is currently investing heavily in the scientific community. Science Foundation Ireland (SFI) is a key organisation in the implementation of the [Strategy for Science, Technology and Innovation 2006-2013](#). A sum of €8.2 billion has been allocated for scientific research of which SFI has responsibility to invest €1.4 billion. SFI's [Research Frontiers Programme](#) supports the very best research in a broad range of disciplines in Science, Mathematics and Engineering. One of the recent investments by SFI in the areas of mathematics was the funding for the establishment of the **Claude Shannon Institute for Discrete Mathematics, Coding, Cryptography and Information Security**. This institute is a new and exciting development in Ireland for research in Mathematics of Communications. The Claude Shannon Institute's mission is to support research in broad areas of Mathematics of Communications.

Focus on Mathematical Methods in Information Theory

Our theme indicates a technical focus on algebraic methods in information theory without excluding other areas of this discipline.

We plan to engage researchers working on the fundamentals on information theory as well as questions of implementation.

Core areas will include:

- Information theory in biology
- Source coding and compression
- Coding for wireless systems
- Coding for sensor and ad-hoc networks
- MIMO and space-time coding

- Graph-based codes and iterative decoding
- Sequences and coding
- Cryptography
- Compressed sensing

Organization:

Workshop Co-chairs -

Marcus Greferath: University College Dublin & the Claude-Shannon Institute for Discrete Mathematics, Coding and Cryptography, Ireland

Joachim Rosenthal: Department of Mathematics, University of Zurich, Switzerland

Technical Program:

Technical Program Committee Co-chairs

- to be announced

Volunteers for Organization Committee:

- Vitaly Skachek, Eimear Byrne, Gary McGuire, Jens Zumbraegel
- (further members to be confirmed)

Dates

From August 30th till September 3rd 2010. August and September are mild months in Dublin. Our research for a venue has shown that the Radisson SAS Royal, well located in Dublin's City Centre is an ideal place to host the workshop.

Location of Dublin Ireland:

Dublin is on the edge of Europe with London just over an hour away, while New York can be as little as five hours.



How to get there:

Travelling to Ireland couldn't be easier with a wide range of airline connections, and flights covering over 70 routes from the UK, US, Middle East and Europe. And it doesn't take forever to reach our shores, either. London is just over an hour away, while New York can be as little as five hours.

Venue in Ireland:

As mentioned, the workshop will take place in the Radisson SAS Royal Hotel that is located in Dublin's City Centre. This hotel has offered excellent prices for the event in question.



Preliminary Budget:

We assume full registration late for 750 euro, whereas early registration will be available for 650 euro. The figures for members will be 650 euro (late) and 550 euro (early). We expect administrative charges of 4000 euro, and plan to have 5 invited speakers (at 1000 euro each). A welcome reception for 90 participants should be available for 2700 euro. For the excursion (Newgrange neolithic tomb) we have computed 4500 euro. As shown in the detailed budget we have the conference room hire for 65 euro per person per day, which includes a two course lunch and several coffee breaks and furthermore all audio visual materials. We plan to produce 100 proceedings at 10 euro each, and will distribute bags, pads, pens, and an attendee gift for 17 euro total. A conference office will be available for 750 euro. Internet is free in the entire building. We assume Credit card fees of 2126 total which is based on 4% charges. Promotional Materials (pads, bags, CD proceedings etc): 2000 Euro

More images:

