Training School

This Training School provides intensive training in emerging methodologies and experimental techniques to characterize stochastic electromagnetic (EM) fields. This includes multiprobe time-domain near field scanning techniques for noisy EM fields as well as advances in modeling and characterization of stochastic fields in reverberation chambers. Students (including PhD), early career investigators, educators, and practitioners are welcome to participate.

Travel Grants for Trainees

Trainee grants are available for attendees providing full funding for travel and subsistence (within COST rules). Write us about your interest in the training, your professional background, and apply!

Registration

Participation in the training school is free of charge. Registration is required.
To register for the training school or to apply for travel grants, please write to
Ms. Dorrit Tyack (dorrit.tyack@nottingham.ac.uk).

Local Organizer

Prof. Charles Sammut, *University of Malta, Malta*
charles.v.sammut@um.edu.mt
Dr. Louis Zammit Mangion, *University of Malta, Malta*
louis.zammit-mangion@um.edu.mt

Venue

Old University Building, St Paul Street, Valletta
University of Malta, Malta

More information... ⟹

L-Università ta' Malta

COST IC 1407 - ACCREDIT

Participating Countries

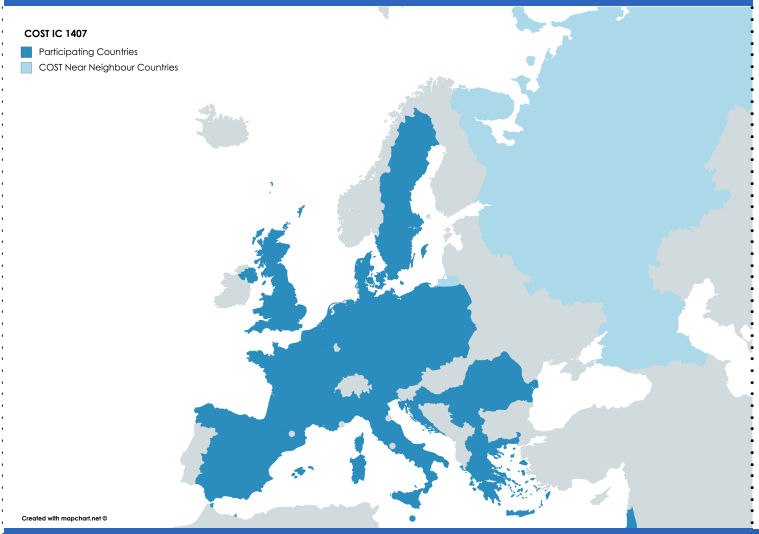
Austria, Belgium, Croatia, Czech Republic, Denmark, France, fYR Macedonia, Germany, Greece, Israel, Italy, Malta, Netherlands, Poland, Romania, Serbia, Slovakia, Spain, Sweden, United Kingdom.

COST Near Neighbour Countries

Russian Federation

COST International Partner Countries

United States of America



http://www.cost-ic1407.eu/

cost
EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY

ICT COST Action IC1407

Advanced Characterisation and Classification of Radiated Emissions in Densely Integrated Technologies
(ACCREDIT)

Training School

EMC for Emerging Technologies

April 19th – 20th, 2018

Malta

What is COST?

- Founded in 1971, COST is an intergovernmental European framework for cooperation in the field of scientific and technical research. COST Actions cover basic and pre-competitive research as well as activities of public utility.
- COST has been successful in maximizing European research coordination and enhancing European integration.

Overview COST IC 1407 - ACCREDIT

The growth of Internet-enabled smart infrastructures underpinning virtually every sector of economic and social life requires complex, high performance and highly integrated electronic systems.

The electromagnetic interference (EMI) will increase with the anticipated increase of clock speeds, frequency of operation and circuit density. Immunity levels will also decrease due to lower supply voltages and lower signal power levels. Traditionally the potential EMI sources were assessed in the frequency domain assuming static emissions. This is not valid for multifunctional devices with many operating modes and wideband digital receivers. New approaches that fully account for time dependence and uncertainty are needed.

This COST Action fully addresses the challenges of the stochastic and broadband nature of EMI in current and future complex multi-functional systems through a coordinated international research programme specifically aimed at

- modelling approaches to include efficient behavioural models, propagation andinteraction of stochastic field distributions.
- experimental methods including wideband near field probes and efficient time orfrequency domain EMI measurement.

ACCREDIT Structure

Chair of the Action:

Prof. David Thomas
dave.thomas@nottingham.ac.uk
University of Nottingham, U.K.

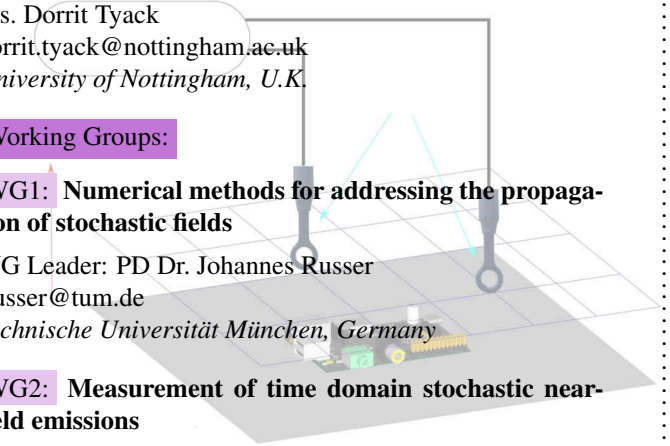
Vice Chair of the Action:

Prof. Damienne Bajon
damienne.bajon@isae.fr
ISAE-Université de Toulouse, France

Secretary:

Ms. Dorrit Tyack
dorrit.tyack@nottingham.ac.uk
University of Nottingham, U.K.

Working Groups:



WG1: **Numerical methods for addressing the propagation of stochastic fields**

WG Leader: PD Dr. Johannes Russer
jrusser@tum.de
Technische Universität München, Germany

WG2: **Measurement of time domain stochastic near-field emissions**

WG Leader: Prof. Davy Pissoort
davy.pissoort@kuleuven.be
KU Leuven Technologiecampus, Belgium

WG3: **Equivalent models of noise sources**

WG Leader: Dr. Sidina Wane
sidina.wane@ieee.org
eV-Technologies, France

WG4: **Guidelines for the formulation of standards**

WG Leader: Prof. Valter Mariani Primiani
valter.mariani@univpm.it
Università Politecnica delle Marche, Italy

Schedule

Thursday, April 19

Old University Building

9:00 am – 9:30 am Registration and Welcome

9:30 am – 10:30 am **Time Domain Measurements**
Dr. Marco Azpúrua, Prof. Ferran Silva, *Universitat Politècnica de Catalunya*

10:30 am – 10:50 am Coffee Break

10:50 am – 11:50 am **The Interconnected Wireless World, a Major Challenge for EM-Coexistence**
Prof. Frank Leferink, *University of Twente*

11:50 am – 1:30 pm Lunch Break

1:30 pm – 2:30 pm **Stochastic Electromagnetic Fields**
Dr. Johannes Russer, Prof. Peter Russer, *Technische Universität München*

2:30 pm – 3:30 pm **Signal Processing**
Prof. Andrey Baev, *Moscow Aviation Institute*

3:30 pm – 4:00 pm Coffee Break

4:00 pm – 5:00 pm **Statistical Signal Processing**
Prof. Yury Kuznetsov, *Moscow Aviation Institute*

Friday, April 20

9:30 am – 10:30 am **Near Field Scanning**
Prof. Dave Thomas, *University of Nottingham*

10:30 am – 10:50 am Coffee Break

10:50 am – 11:50 am **Reverberation Chambers**
Prof. Valter Mariani, *Università Politecnica delle Marche*

11:50 am – 1:30 pm Lunch Break

1:30 pm – 2:30 pm **Large-Scale Data Processing in Cloud: Possibilities & Challenges**
Dr. Saško Ristov, *University of Innsbruck*

2:30 pm – 2:50 pm Coffee Break

2:50 pm – 3:50 pm **Industrial Requirements**
Dr. Sidina Wane, *eV-Technologies*

3:50 pm – 4:50 pm **Modelling Challenges for EMC Problems**
Prof. Christos Christopoulos, *University of Nottingham*

4:50 pm – 5:00 pm Closing Remarks