

Management structure (Core Group)

Action chair

Guido Valerio, Sorbonne Université, France

Action vice chair

Oscar Quevedo-Teruel, KTH, Sweden

Grant holder scientific representative

Kristian Zarb Adami, University of Malta, Malta

Working groups and transverse activities leaders and coordinators

WG 1 Higher-symmetric waves: dispersive engineering

Tiago Morgado, University of Coimbra, Portugal

Simon Horsley, University of Exeter, UK

WG 2 Higher-symmetries to design radiating devices

Eva Rajo-Iglesias, University Carlos III of Madrid, Spain

Marco Antoniadou, University of Cyprus, Cyprus

WG 3 Higher-symmetries for guided-wave components

Marta Martínez Vázquez, Renesas Electronics, Germany

Pablo Padilla, University of Granada, Spain

WG 4 Modelling of higher-symmetries

Francesca Vipiana, Polytechnic of Turin, Italy

WG 5 Dissemination of results

Jan Kracek, Czech Technical University in Prague, Czechia

WG 6 Training activities

Valma Prifti, Polytechnic University of Tirana, Albania

TA Medical applications

Tuba Yilmaz Abdolsaheb, Istanbul Technical University, Turkey

Stavros Koulouridis, University of Patras, Greece

TA Space

Eloy de Lera Acedo, University of Cambridge, UK

Herve Legay, Thales Alenia Space, France

TA 5G

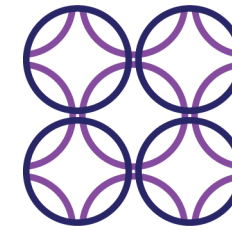
Astrid Algaba Brazalez, Ericsson, Sweden

Grant Coordinator, STSM and Virtual Mobilities

Enrica Martini, University of Siena, Italy

ITC grants

Sergio Matos, Instituto de Telecomunicações, Portugal



COST ACTION CA18223

SYMAT

FUTURE COMMUNICATIONS WITH
HIGHER-SYMMETRIC ENGINEERED
ARTIFICIAL MATERIALS

<https://symat-cost.eu/>

Scientific meeting, Core Group meeting, Management Committee meeting

4 - 5 May 2023, Lisbon, Portugal

Organizers

ISCTE - University Institute of Lisbon

Instituto de Telecomunicações,

Sérgio Matos

Venue

Iscte – Instituto Universitário de Lisboa,

Avenida das Forças Armadas, 1649-026, Lisbon, Portugal

Room: Auditorium Ferreira de Almeida (B2.03) – Building II

Online link:

<https://videoconf-colibri.zoom.us/j/3477274141>

WIFI connection:

eduroam or local wifi (information at the registration desk)

Partners



Sponsor



Find the program on-line:



Thursday | 4 May 2023

8:30–9:00 Registration

Auditorium Ferreira de Almeida

9:00–10:30 Opening

Auditorium Ferreira de Almeida, *Session chair: Sérgio Matos*

9:00–9:10 Inaugural address by Vice-Rector of ISCTE - University Institute of Lisbon for Research and Technological Modernization
Jorge Costa, ISCTE-IUL, Portugal

9:10–9:20 Opening Remarks from the conference co-organiser
José Borrego, ANACOM, Portugal

9:20–9:35 Promoting Portuguese URSI Committee activities
José Borrego, Chairman URSI Portuguese Committee, ANACOM, Portugal

9:35–9:50 Promoting Spanish URSI Committee activities
Miguel Ángel G. Laso, Chairman URSI Spanish Committee, Universidad Pública de Navarra, Spain

9:50–10:10 Ongoing Research at the Instituto de Telecomunicações
Carlos Fernandes, Instituto de Telecomunicações, University of Lisbon - IST, Portugal

10:10–10:30 Ongoing Research at the Centre of Telecommunications and Multimedia of INESC-TEC
Luís Pessoa, INESC-TEC, Portugal

10:30–11:00 Coffee break

11:00–12:30 Industrial presentations (I)

Auditorium Ferreira de Almeida, *Session chair: Guido Valerio*

11:00–11:45 Manipulation and control of electromagnetic waves using programmable surfaces
Antonio Clemente, CEA-LETI, France

11:45–12:30 Periodic surfaces for space antennas
Hervé Legay, Thales Alenia Space, France

12:30–14:00 Lunch

“I-Terrace” restaurant (building INDEG)

14:00–15:30 Core Group meeting

Auditorium Ferreira de Almeida

15:30–16:00 Coffee break

16:00–17:30 Management Committee meeting

Auditorium Ferreira de Almeida

18:00–19:30 Guided tour of Lisbon

Bus leaving at 18:00 at ISCTE-IUL

[Instructions for the tour](#)

20:00–22:30 Dinner at Chapitô à Mesa

Costa do Castelo 7, 1149-079 Lisboa, Portugal

[Chapitô à Mesa](#)

Friday | 5 May 2023

09:00–10:00 Industrial presentations (II)

Auditorium Ferreira de Almeida, *Session chair: Oscar Quevedo-Teruel*

09:00–9:30 Viasat phased array antennas for GSO and NGSO satellite access
Nevena Saponjic, Viasat, Switzerland

9:30–10:00 Antenna challenges and opportunities for LEO-based communications
Sara Mugnaini, OneWeb, United Kingdom

10:00–10:30 IEEE Distinguished Lecture

Smart Sensing and IoT for Everyday Life
Octavian Postolache, ISCTE-University Institute of Lisbon, Portugal

10:30–11:00 Coffee break

11:00–12:30 Working Group Presentations (I)

Auditorium Ferreira de Almeida, *Session chair: Eva Rajo-Iglesias*

11:00–11:25 Fabry-Perot cavities excited by multiple sources
Davide Comite, Sapienza University of Rome, Italy

11:25–11:50 Application of the Intersection Approach for near-field Spatially Fed Arrays antenna synthesis
Alvaro Vaquero, University of Oviedo, Spain

11:50–12:15 Three-dimensional near-field millimeter wave imaging
Semih Doğu, Mehmet Nuri Akıncı, Istanbul Technical University, Turkey

12:15–12:30 Synthesis and Optimization of Excitation and Reactive Loading of Antenna Array Elements
S. Travnicek, J. Kracek, P. Hazdra, Czech Technical University in Prague, Czechia

12:30–14:00 Lunch

“I-Terrace” restaurant (building INDEG)

14:00–15:30 Scientific presentations (II)

Auditorium Ferreira de Almeida, *Session chair: Enrica Martini*

14:00–14:30 Synthesis of passive lossless metasurfaces for perfect anomalous reflection
Cristina Yepes¹, Marco Faenzi², Stefano Maci² and Enrica Martini², ¹Public University of Navarra, Spain ²University of Siena, Italy

14:30–15:00 Nonreciprocal and Non-Hermitian transistor-like responses in metamaterials with broken inversion symmetry
Tiago Morgado, Instituto de Telecomunicações, Universidade de Coimbra, Portugal

15:00–15:30 Symmetric and Asymmetric Time-switched metastructures
Davide Ramaccia, Roma Tre University, Italy

15:30–16:00 Coffee break

16:00–17:30 Scientific presentations (VI)

Auditorium Ferreira de Almeida, *Session chair: Jan Kracek*

16:00–16:30 Coupled wave analysis of parallel-plate waveguides loaded with periodic, arbitrarily modulated, glide-symmetric, dielectric structures
Dubravko Tomic, Marko Bosiljevac, Zvonimir Sipus, University of Zagreb, Croatia

16:30–17:00 Higher symmetries in planar structures
Federico Giusti, Enrica Martini, University of Siena, Italy

17:00–17:30 Topological singularities in systems with continuous translation symmetry
David Fernandes, Instituto de Telecomunicações, Lisbon, Portugal

17:30-17:40 Closing

Auditorium Ferreira de Almeida

Sérgio Matos, ISCTE-IUL, Portugal
Guido Valerio, Sorbonne Université, France

18:10-19:00 Visit of Instituto de Telecomunicações Antenna Labs

Carlos Fernandes, Instituto de Telecomunicações, University of Lisbon - IST, Portugal

[Laboratory Antennas and Propagation - Lisbon](#)