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 Antoniades, 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

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COST ACTION CA18223
SYMAT
FUTURE COMMUNICATIONS WITH HIGHER-SYMMETRIC ENGINEERED ARTIFICIAL MATERIALS

https://symat-cost.eu/

Scientific meeting, Core Group meeting, MC meeting

2 - 3 October 2023, Rome, Italy

Organizer

Metamorphose VI AISBL (MVI)
Davide Ramaccia, MVI, Belgium,/RomaTre University, Italy

Venue

Department of Industrial, Electronic and Mechanical Engineering, RomaTre University
Building "Vasca Navale - Part B", Room "Aula Magna" - ground floor
Via Vito Volterra 62 00146, Rome, Italy

Online link:

https://teams.microsoft.com/l/meetup-join/19:meeting_NDUzMWIxMmEtZWE1ZC00NjU1LTk5MWMtMGJjNDkwNzgxYjQ0@thread.v2/0?context=%7B%22Tid%22:%22ffb4df68-f464-458c-a546-00fb3af66f6a%22,%22Oid%22:%2291a7fef2-3cbd-4eca-b745-1e57cd18a5c1%22%7D

WIFI connection:

Eduroam or local wifi (access instructions in the bag)

Find the program on-line:

Monday | 2 October 2023

8:30–9:00 Registration
Main hall of Building "Vasca Navale - Part B"

9:00–10:30 Opening Session
Room "Aula Magna", *Session chair: Davide Ramaccia*

9:00–9:30 Welcome and Opening Remarks
Davide Ramaccia, MVI, Belgium,/Roma Tre University, Italy
Guido Valerio, Sorbonne University, France

9:30–10:30 Metamorphose activities and Research at the Antennas and Metamaterials Laboratory of RomaTre university
Filiberto Bilotti
Executive Director MVI, Belgium/ RomaTre University, Italy

10:30–11:00 Coffee break
Art Gallery at Vasca Navale building, Roma Tre University

11:00–12:45 Focussed Session
Room "Aula Magna", *Session chair: Oscar Quevedo-Teruel*

11:00–12:15 Introduction to geodesic lenses
Tomas Tyc, Masaryk University, Czechia

12:15–12:45 Dispersion engineering at ultrathin thicknesses: Arbitrarily-Broadband Quadratic phase manipulations with multiresonant metasurfaces
Odysseas Tsilipakos, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Athens, Greece

12:45–14:00 Lunch
Art Gallery at Vasca Navale building, Roma Tre University

14:00–15:30 Core Group meeting
Room "Aula Magna"

15:30–16:00 Coffee break
Art Gallery at Vasca Navale building, Roma Tre University

16:00–17:30 Management Committee meeting
Room "Aula Magna"

20:00–22:30 Social dinner at Restaurant ”Velavevodetto”

Via di Monte Testaccio, 97, 00153 Roma RM
GMaps: https://maps.app.goo.gl/19eHWSrwYaJYkupN8

Tuesday | 3 October 2023

09:00–10:45 Numerical Methods
Room "Aula Magna", *Session chair: Francesca Vipiana*

09:00–9:30 Fast Numerical Analysis of Metasurfaces by Characteristic Basis Functions in EFIE Framework
Csathó Botond Tamás and Bálint Horváth,
Budapest University of Technology and Economics, Hungary

9:30–10:15 Efficient and Rigorous Analysis of Leaky Modes in 2-D EBG Guiding Structures and Its Application for Leaky-Wave Antennas and EBG Cavity Antennas
Vakhtang Jandieri Universitat Duisburg Essen, Germany
Paolo Baccarelli, Roma Tre University, Italy

10:15–10:45 Fast full-wave computation of dispersion curves using the Method of Moments
Denis Tihon and Christophe Craeye
Université catholique de Louvain, Belgium

10:45–11:15 Coffee break
Art Gallery at Vasca Navale building, Roma Tre University

11:15–12:45 Antennas and Metamaterials (I)
Room "Aula Magna", *Session chair: Eva Rajo-Iglesias*

11:15–11:45 A Double Slot Array Antenna Based on Gap Waveguide Technology at mm-wave Frequencies. Analysis and Measurements. *Panagiotis Petroutsos, Stavros Koulouridis, University of Patras, Greece*

11:45–12:15 TiO2-nanoparticle nanostructuring via Soft Colloidal Lithography negative templating of symmetric complex tessellations.
Gerardo Guerrero-Felix, Carmen Lucia Moraila-Martinez, Sandra Correia, Maria Rute Ferreira André, Miguel Angel Fernandez-Rodriguez, University of Granada, Spain

12:15–12:45 Meta-Integrated Filtering Antenna Systems
Hossein Sarbandi Farahani,
Institute for High-Frequency Technology, Austria

12:45–14:00 Lunch
Art Gallery at Vasca Navale building, Roma Tre University

14:00–15:30 Antennas and Metamaterials (II)
Room "Aula Magna", *Session chair: Paolo Baccarelli*

14:00–14:30 Higher symmetries in coaxial-type holey unit cell
José Manuel Poyanco Acevedo[1],Dubravko Tomić [2],Zvonimir Šipuš [2], Eva Rajo-Iglesias[1],
[1]University Carlos III of Madrid, Spain, [2]University of Zagreb, Croatia

14:30–15:00 Multimodal transfer matrix approach for the analysis of glide symmetric dielectric/magnetic structures
Ludovica Tognolatti[1], Francisco Mesa[2], Paolo Baccarelli[1] Giuseppe Schettini[1], Oscar Quevedo-Teruel[3]
[1]Roma Tre University, Italy, [2]University of Seville, Spain, [3]Royal Institute of Technology (KTH), Sweden

15:00–15:30 Design of Huygens' cells for transmit-reflect-arrays at 30 GHz
Alessio Berto[1,2], Francesco Foglia Manzillo[1], Guido Valerio[2],
[1]CEA Leti, France, [2]Sorbonne University, France

15:30–16:00 Coffee break
Art Gallery at Vasca Navale building, Roma Tre University

16:00–16:30 Scientific presentation and Closing
Room "Aula Magna", *Session chair: Guido Valerio*

16:00–16:20 Python-Controlled Electromagnetic Simulation in CST Studio Suite
Samuel Travnicek, Jan Kracek, Pavel Hazdra,
Czech Technical University in Prague

16:20–16:35 Sensitivity characterization of multi-band THz metamaterial sensor for possible virus detection
Ana Tatović [1], Milka Potrebić [2], [1]Faculty of Technical Sciences Čačak, University of Kragujevac, Serbia, [2]School of Electrical Engineering, University of Belgrade, Serbia

16:35-16:40 Closing
Davide Ramaccia, MVI, Belgium, Roma Tre University, Italy
Guido Valerio, Sorbonne University, France

17:00-19:00 Visit of the Centrale Montemartini
Meeting point at the entrance of the Building "Vasca Navale - Part B"