

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, Politecnico di Torino, Italy

WG 5 Dissemination of results

Marko Bosiljevac, University of Zagreb, Croatia

WG 6 Training activities

Valma Prifti, Polytechnic University of Tirana, Albania

Jan Kracek, Czech Technical University in Prague, Czechia

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

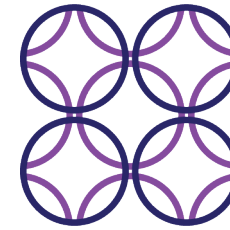


Partners



**L-Università
ta' Malta**

COST Action CA18223
Future communications with higher-symmetric engineered artificial materials



COST ACTION CA18223

SYMAT

FUTURE COMMUNICATIONS WITH
HIGHER-SYMMETRIC ENGINEERED
ARTIFICIAL MATERIALS

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

**Scientific meeting,
Management Committee
meeting and Core Group
meeting**

1- 2 September 2022, Valletta, Malta

Organizers

University of Malta

Kristian Zarb Adami, Alessio Magro, Angele Gixti, Sarah Sammut,

Veronica Barbara, Lucienne May Bugeja, Diandra Borg Meli

Venue

Valletta Campus, Old University building, St. Paul's Street,

Valletta, Malta

Room: Aula Prima

Online link:

<https://universityofmalta.zoom.us/j/91672600160>

WIFI connection:

eduroam or local wifi (information at the registration desk)

Thursday | 1 September 2022

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| 9:30–10:00 | Registration |
| 9:30–10:00 | Opening <i>Aula Prima, Alessio Magro, University of Malta and Guido Valerio, Sorbonne Université</i> |
| 10:00–10:30 | Scientific presentations (I) <i>Aula Prima, Session chair: Guido Valerio</i> |
| 10:00–10:30 | Fractal Octagonal Rings Antenna (FORA) for Radio Astronomy <i>Iman Farhat and Kristian Zarb Adami, University of Malta</i> |
| 10:30–11:00 | Coffee break |
| 11:00–12:30 | Scientific presentations (II) <i>Aula Prima, Session chair: Oscar Quevedo-Teruel</i> |
| 11:00–11:30 | Soft colloidal lithography: a path to self-assemble 2D complex tessellations with potential impact in SyMat <i>Antonio Rubio-Andrés¹, Laura Alvarez-Frances², Delfina Bastos-Gonzalez¹, Miguel Angel Fernandez-Rodriguez¹. ¹University of Granada, Spain, ²University of Bordeaux, France</i> |
| 11:30–12:00 | Full azimuthal coverage glide-symmetric lens antennas <i>Astrid Algaba Brazález, Ericsson Research</i> |
| 12:00–12:30 | Method-of-Moment modelling of higher symmetries <i>Martin Petek and Francesca Vipiana, Politecnico di Torino, Italy</i> |
| 12:30–13:30 | Lunch |
| 14:00–15:30 | Core Group meeting <i>Aula Prima</i> |
| 15:30–16:00 | Coffee break |
| 16:00–17:30 | Management Committee meeting <i>Aula Prima</i> |
| 18:45–21:00 | Guided tour of Mdina |
| 21:00–23:30 | Dinner in Mdina <i>Xara Palace's Trattoria Restaurant.</i> |

Friday | 2 September 2022

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| 09:30–10:30 | Scientific and Working Group presentations (III) <i>Aula Prima, Session chair: Guido Valerio</i> | 15:00–15:30 | Dispersion engineering to address practical leaky-wave antenna designs <i>José Gomez Tornero, Technical University of Cartagena, Spain</i> |
| 09:30–10:00 | Electromagnetic Field Analysis Based on Symmetry Properties Utilizing Characteristic Mode Theory” <i>Axel Hoffmann, Lukas Grundmann, and Dirk Manteuffel, University of Hannover</i> | 15:30–16:00 | Coffee break |
| 10:00–10:30 | Research Activities at CNR-IEIIT and their relation to glide symmetry <i>G. Addamo, L. Ciorba, M. Lumia, F. Paonessa, O.A. Peverini, G. Virone, CNRS IEIIR, Turin, Italy</i> | 16:00–17:50 | Scientific presentations (VI) <i>Aula Prima, Session chair: Eva Rajo-Iglesias</i> |
| 10:30–11:00 | Coffee break | 16:00–16:30 | Synthesis of transmitarray antennas for far- and near-field shaping <i>Francesco Foglia Manzillo, CEA Leti Grenoble, France</i> |
| 11:00–13:00 | Scientific presentations (IV) <i>Aula Prima, Session chair: Oscar Quevedo-Teruel</i> | 16:30–16:40 | Optimizing Project Management using Artificial Intelligence <i>Valma Prifti, Polytechnic University of Tirana, Albania</i> |
| 11:00–11:30 | Finite Element Method-based Analysis of Controlled Reflections from RIS <i>Botond Tamás Csathó and Bálint Péter Horváth, Budapest University of Technology and Economics, Hungary</i> | 16:40–17:00 | Sensitivity characterization of multi-band THz metamaterial sensor for possible virus detection. <i>Ana Tatović¹, Milka Potrebić², and Dejan Tošić², Faculty of Technical Sciences Čačak, ¹University of Kragujevac, Serbia ²School of Electrical Engineering, University of Belgrade, Serbia</i> |
| 11:30–12:00 | Wide band wide scanning polarizing screens: analysis, design and experimental validation <i>Mauro Ettore, IETR, France</i> | 17:00–17:30 | Nyström Method Solution of Electric Field Integral Equation for PEC Surfaces - Preliminary Results <i>Faik Yaman and Mehmet Çayören, Istanbul Technical University, Turkey</i> |
| 12:00–12:30 | Challenges in design of holey glide symmetric Mikaelian lens <i>Dubravko Tomic, Marko Bosiljevac, Zvonimir Sipus, University of Zagreb</i> | 17:30–17:50 | Theoretical Aspects of Planar Antenna with Parity, Time-reversal, Duality Symmetry <i>Jan Kracek, Czech Technical University, Czechia, Enrica Martini, and Stefano Maci, University of Siena, Italy</i> |
| 12:30–13:30 | Lunch | 17:50-18:00 | Closing <i>Guido Valerio, Sorbonne Université, France</i> |
| 14:00–15:30 | Scientific presentations (V) <i>Aula Prima, Session chair: Astrid Algaba Brazález</i> | | |
| 14:00–14:30 | All-Metal Leaky-Wave Antennas Based on Asymmetric Unit Cells <i>Davide Comite, Sapienza University of Rome, Italy</i> | | |
| 14:30–15:00 | Dispersion Analysis of Periodic Structures in Anisotropic Media <i>Antonio Alex-Amor¹, Ángel Palomares-Caballero¹, Francisco Mesa², Oscar Quevedo-Teruel³, Pablo Padilla¹, ¹University of Granada, Spain, ²University of Seville, Spain, ³Royal Institute of Technology, Sweden</i> | | |