



Network
Research
Lab

The **European Academy of Sciences and Arts (EASA)**¹ of Salzburg

in collaboration with

the **Laboratory of Networks and Telecommunications Systems, Services and Security**
of the **Department of Informatics of the University of Piraeus (NetLab)**²

invites you to participate

in a Workshop and brainstorming session on STEM in Arts & Culture (STEMAC),

on Thursday 8 June 2023, 17:00 – 21:00 (Athens time)

Endorsed by the MSc "Digital Culture, Smart Cities, IoT and Advanced Digital Technologies", Dept. of Informatics, Univ. of Piraeus,

with the support of the Hellenic Physical Society.

Place: Main conference amphitheater, University of Piraeus,

Karaoli and Dimitriou 80, 18534, Piraeus, Greece

Contact point: Dimitrios Kotsifakos,

kotsifakos@unipi.gr

PROGRAMME

17:00-17:05 Welcome by the Organizers

17:05-17:15 Klaus Mainzer (President of EASA, online), *"Highlights of STEMAC-Education"*

17:15-17:25 Ioannis Liritzis, *"The STEMAC: definition, Vision, Strategy, Sustainability, Research & Implementations"*

17:25-17:35 Zsolt Lavicza, *"Technological and Pedagogical Innovations in STEAM Education"*

¹ <https://euro-acad.eu/>

² NetLab - <http://netlab.cs.unipi.gr/>

17:35-17:45 Dr. Branko Andjic, “STEAM Education, 3D Printing for Inclusiveness”

17:45-17:55 Mathias Tejera, “Augmented Reality and 3D Printing for Architectural STEAM Modelling”

17:55-18:05 Shereen El Bedewy (online): “Fostering Transdisciplinary STEAM Practices Through Architectural Modelling”

18:05-18:15 Lambros Psomas, “STEM in Homo Educantus Education School, Corinth, Greece”

18:15-18:25 Dimitris Tsimpouris, «Cycladic art: a journey from pottery to 3D printing»

18:25-18:45 Coffee-Refreshments

18:45 – 18:55 Dr. Dimitrios Kalaitzidis, “Climate Change in Education and STEMAC Perspective”

18:55 – 19:05 Christos Douligeris, “From “Design STEM+ to Digital Culture: Scientific Actions in a STEMAC Context”

19:05-19:15 Anastasia Georgaki, “New technologies related to the singing voice within the context of STEMAC”

19:15 – 19:25 Demetrios Sampson, “Digital Systems for Supporting STEM Education”

19:25 – 19:35 Konstantinos Kalovrektis, “Openlab - A space for STEAM-AC activities”

19:35 – 19: 45 Kostas Skordoulis, “Student performance in the Postgraduate program STEM education and educational robotics systems at the Univ of Athens”

19:45 – 19:55 Dimitrios Kotsifakos, “Research, interventions, and scientific papers on STEMAC Directions for Greek Public Schools”

19:55 – 20: 05 Spyridon Papadakis, “STE(A)M in Primary and Secondary Education of Greece: Projects and Conference”

20:05- 21:15 Brainstorming Discussion, Exchanges, Exploration of cooperations, and of forming a European Network

Speakers/Participants affiliations

Selective members of the EASA Expert Task Group

Prof Klaus Mainzer, President of EASA, Excellence Emeritus TUM, Germany.

Prof Ioannis Liritzis, Dean of Class IV Natural Sciences, EASA, Salzburg; coordinator of the Expert Group STEMAC at the EASA; Distinguished Prof. Henan University, China

Prof Zsolt Levisca, JKU, Linz; Director of Research: International GeoGebra Institute (IGI):
<http://geogebra.org> JKU Linz School of Education, Research Methods:
<https://www.jku.at/linz-school-of-education/>; Geomatech Project:
<http://geomatech.hu>

Prof. Hui Yu, Changjiang Scholar Distinguished Professor of Chinese Ministry of Education; Professor and Director of Center for Ethnomusicology, Yunnan University; Chair Professor at Xiamen University Musical Acoustics, Anthropology of Music, Computational Musicology; Yunnan University / Xiamen University

Dr. Andreas Bauer, Director of the Ars Electronica Centre in Linz;
<https://www.hub.berlin/speaker/andreas-bauer>

Prof. Kristof Fenyvesi, Finnish Education Research Centre and head of the Experience Workshop Movement; University of Jyväskylä Agora Building B435.2 FI-40014, PO Box 35, Finland Web: <https://ktl.jyu.fi/en>

Prof. Dr h.c Ludwig Tavernier, Art+Cultural History, Koblenz University, Department of Aesthetics and Art History, Augustusstraße 11 | D-55131 MAINZ Germany;
<https://www.arthistcom.com>, https://www.rlp-forschung.de/public/people/Ludwig_TAVERNIER_4/cv#:~:text=Institute%20for%20Art,uni%20Koblenz.de;ludwig.tavernier@web.de.

Prof. Livia Teodorescou-Ciocanea, composer, pianist and Maths, National University of Music Bucharest, Composition Department, Romania.

Prof. Thanasis Fokas, Chair in Nonlinear Mathematical Science, Department of Applied Mathematics and Theoretical Physics, University of Cambridge, UK/ Academy of Athens/ European Academy of Sciences & Arts

Prof. Tassos Bountis, Director of Center for Research and Application of Nonlinear Systems University of Patras, Greece; European Academy of Sciences & Arts

Prof. Fernando Feliu-Moggi, Department of Languages and Cultures Digital Humanities; Co-Founder, UCCS Center for Research Frontiers in Partner Program Manager University of Colorado-National Security Agency; Team Chair for Explore – Arts, Humanities and Culture University of Colorado Colorado Springs, USA

Prof. Zhen Wang, (Reinforcement Learning, Multi-Agent Systems, Pattern Recognition, Games, Networks), National Distinguished Professor, Vice Dean, Institute of Science and Technology Northwestern Polytechnical University, Xi'an, China
<https://iopen.nwpu.edu.cn/info/1329/1369.htm>

Prof. David David, Professor of Science Education Director of STEM Education Lab, Florida Atlantic University, USA

Prof. Peter Herrmann, Human Rights Centre at the Law Faculty; digitalization, economics, law, philosophy, social science, sociology, Research Fellow at the Human Rights Center. Law School at the Central South University, Changsha, PRC.

Collaborators with EASA

Branko Andjic, Dr at JKU Linz School of Education, STEM Education Centre, Johannes Kepler University, Linz, Austria, <http://www.punte.eu/team/branko-andjic/>

Robert Weinhandl, Dr, JKU, Linz School of Education, STEM Education Centre, Johannes Kepler University, Linz, Austria

Janika Leoste, Tallinn University leading the EduSpace and STEAM research group, Visiting Researcher in Educational Robotics Business Collaboration and Innovation Chief Specialist, School of Educational Sciences, Tallinn University, https://www.etis.ee/CV/Janika_Leoste/est?tabId=CV_ENG

Prof. José Manuel Diego Mantecón Department Director Department of Mathematics, Statistics and Computing Faculty of Sciences, Santander, Spain

Dr. Mathias Tejera JKU/Linz School of Education/Linz School of Education/Department for MINT didactics/team

Shereen El Bedewy, PhD Student at Johannes Kepler University Linz, Austria

Private Schools

Mr. Dimitris Tsimpouris, S. Avgoulea Linardatou SA, Schools, Athens, Greece

Mr. Lambros Psomas, Homo Educantus Education School, Corinth, Greece

University of Piraeus

Prof. Demetrios Sampson, PhD (ElectEng) (Essex), PgDip (Essex), BEng/ Meng (Elec) (DUTH), CEng Golden Core Member, IEEE Computer Society, | Director MSc Program in Digital Learning | Director Research Lab Digital Systems for Learning and Education, Department of Digital Systems, University of Piraeus, Greece

Prof. Christos Douligeris, Dep. of Informatics, University of Piraeus

Dr. Dimitrios Kotsifakos (Post-Doc, PhD, MSc), Electronic Engineering, Dep. of Informatics, University of Piraeus.

National & Kapodistrian University of Athens

Prof. Kostas Skordoulis, Professor of Epistemology and Didactical Methodology of Physics and currently Head of the Postgraduate Studies Program at the Department of Primary Education, National and Kapodistrian University of Athens,

Prof. Anastasia Georgaki, Music Technology laboratory, labmat.music.uoa.gr, Head of the Department of Music Studies, National and Kapodistrian University of Athens, <http://scholar.uoa.gr/georgaki/>

University of Thessaly

Dr. Konstantinos Kalovrektis, Department of Computer Science and Biomedical Informatics, University of Thessaly

Public School Advisor of Education

Dr. Spyridon Papadakis, Adjunct Faculty, Hellenic Open University (HOU), Achaia Computer Science Advisor of Education, Organizational Coordinator, Regional Center for Educational Planning of Western Greece.

Dr. Dimitrios Kalaitzidis, Coordinator of Sustainable School, Climate Change Education Multiplier-UNESCO, Principal Ralleio Junior Secondary School, Piraeus, Greece

Hellenic Physical Society

Mr. Panagiotis Fildisis, Electronic Engineering, Principal of 1st Laboratory Center of Agiou Dimitriou, Ministry of Education, Athens, Vice President Hellenic Physical Society, Greece
