CALL FOR CONTRIBUTIONS
Technology and Arts in Mathematics Education (TAME)
Workgroup/Workshop
www.techartmathedu.tk

at the

7th CADGME Conference on Digital Tools in Mathematics Education

June 26-29, 2018
Coimbra, Portugal

Organizers

• Kristof Fenyvesi (fenyvesi.kristof@gmail.com), University of Jyväskylä, Finland; Bridges Organization, USA - Experience Workshop Math - Art Movement.

• Zsolt Lavicza (lavicza@gmail.com) Johannes Kepler University, STEM), Education Centre, Linz, Austria; Budapest Metropolitan University, Budapest, Hungary; University of Cambridge, Faculty of Education, Queens' College, U.K.

• Penousal Machado (machado@dei.uc.pt) Coordinator of the Cognitive and Media Systems group and Scientific Director of the Computational Design and Visualization Lab. of the Centre for Informatics and Systems of the University of Coimbra.

• Tomás Recio (tomas.recio@unican.es), Universidad de Cantabria, Santander, Spain.

• Carlota Simões (carlota@mat.uc.pt), Directora del Museu da Ciência da Universidade de Coimbra, Portugal.

Aim and scope

Discussions on the connections between mathematics, art and technology are active and pertinent today. Various experts working in different scientific and technological fields are inspired by phenomena that combine mathematical and artistic qualities. Respectively, several contemporary artists, graphic designers, craftsmen, and craftswomen are fascinated by scientific discoveries,

mathematics, and geometry and use the formulas and principles of each in different ways in their artistic and creative work. These can hold great potentials for teachers to enrich their teaching content and provide more motivation and engagement for their students. Schools are offered with various technological solutions, which can present mathematics & art connections on stimulating ways. Several educational projects and methodologies are implementing different interpretations of the relationship between these areas: teachers, education researchers and artists share a common interest in combining creative thinking, intellectual curiosity, and aesthetic sensibility in the learning process.
In the *Technology and Arts in Mathematics Education (TAME) Workgroup* we would like to explore these connections through examining each others' good practices in the field and by fostering a didactical, theoretical exchange of ideas.

Structure

• Attending different presentations submitted to the TAME Workshop will be the main working format.

• A conference by Pedro Freitas and Simão Costa (University of Lisbon*): The Geometry of Almada Negreiros in the Coimbra murals*, about the painter Almada Negreiros and his connections to geometry (c.f. https://gulbenkian.pt/almada-comecar/almada-e-a-geometria/) is already planned at the *TAME* working group:

• Moreover, there will be an exhibition related to the *TAME* aims at the Museu da Ciência da Universidade de Coimbra (http://www.museudaciencia.org), involving Robert Fathauer (http://robertfathauer.com), Ho Gul Park (http://en.4dframe.com) and Penousal Machado (https://cdv.dei.uc.pt/authors/penousal-machado/).

• A mathematical tour through Coimbra's beautiful monuments and streets is also planned as a complementary *TAME* activity.

News about the session should be posted at the CADGME 2018 conference web page https://www.uc.pt/en/congressos/cadgme2018 and at the workshop web page (in construction) www.techartmathedu.tk