

Slovak University of Technology in Bratislava Faculty of Mechanical Engineering

17th Conference on Applied Mathematics APLIMAT 2018

Proceedings

CULTURAL HERITAGE AND SCIENCE IN ROME: A PROJECT OF OUTREACH OF SCIENTIFIC CULTURE

¹TEDESCHINI LALLI Laura (IT), ²BRANCALEONI Fabio, ³CANEVA Giulia, ⁴CARLINI Alessandra, ⁵CORRADO Sveva, ⁶DE ANGELIS Ilaria, ⁷DEL GRASSO Monica, ⁸FALCOLINI Corrado, ⁹GARGANO Maurizio, ¹⁰MAGRONE Paola, ¹¹MININNI Marco, ¹²PAOLUCCI Francesca, ¹³MOBILIO Settimio ¹Università degli Studi Roma Tre, email: tedeschi@mat.uniroma3.it

¹Università degli Studi Roma Tre, email: tedeschi@mat.uniroma3.it

²Università degli Studi Roma Tre, email: fabio.brancaleoni@uniroma3.it

³Università degli Studi Roma Tre, email: giulia.caneva@uniroma3.it

⁴ Liceo Scientifico Cavour, email: alessandracarlini@yahoo.it

⁵Università degli Studi Roma Tre, email: sveva.corrado@uniroma3.it

⁶Università degli Studi Roma Tre, email: ilaria.deangelis@uniroma3.it

⁷Laboratorio "www.formulas.it", email: delgrasso.monica@gmail.com

⁸Università degli Studi Roma Tre, email: falco@mat.uniroma3.it

⁹Università degli Studi Roma Tre, email: maurizio.gargano@uniroma3.it

¹⁰Università degli Studi Roma Tre, email: mar.minini@gmail.com

¹²Università degli Studi Roma Tre, email: francesca.paolucci@uniroma3.it

¹³Università degli Studi Roma Tre, email: settimio.mobilio@uniroma3.it

Keywords: scientific culture, geology, botany, physics, mathematics, architecture, cultural heritage, Rome.

Mathematics Subject Classification: Primary 97A30, Secondary 00A67.

Scientific culture is part of our culture, our origins and roots, and cultural heritage allows awareness of how much we are immersed in scientific knowledge. Rome is a rich natural and historical laboratory where we have proposed on-field activities to transmit scientific culture to primary and high schools. The multidisciplinary project From cosmos to the earth, to life, to culture. A resilient strategy for the dissemination of natural, physical and mathematical sciences: a proposal for a diffused museum for the city of Rome (Principal Investigator Prof. Settimio Mobilio) was written by the Departments of Architecture, of Mathematics and Physics and of Science of Roma Tre University, and was funded by the Italian Ministry of Education in 2016. It involves Architecture, Physics, Botany, Geology, and Mathematics. Digital resources cannot replace on-field experience, especially as scientific approach. Our motto is "The earth beneath your feet, the sky above your head, architecture on the premises". The languages of art and science cooperate to tell to school audiences about the geological features of the center of Rome and the ornamental stones of medieval Basilicas; about the richness of the natural elements of the imperial Ara Pacis of Augustus, both decorative, and symbolic-allegorical, and finally about the extraordinary botanical biodiversity that converged in Rome from all over the world, and changed along history with geographical discoveries, illustrated in the festoons of the Renaissance Loggia di Amore e Psiche. Astronomy in the educational Astrogarden of Roma Tre unusually links myths and direct observations. URL, http://museodiffuso.uniroma3.it/index.php/it/