PhD DISG

Director
Patrizia Trovalusci

Sapienza Università di Roma
PhD Program in
Structural and Geotechnical Engineering

April 27, 2023 – 2:30pm-4:30pm

Prof. Katherine A. Liapi

Department of Architecture, University of Patras, Greece

Minimal surface tensegrity networks

The exploration of new configurations of tensegrity structures is expected to contribute to the expansion of the applications of the tensegrity concept in building design. Minimal surface tensegrity networks are double layer tensegrity structures, composed of tensegrity units of square base, with the two layers being minimal surfaces. Design algorithms that integrate methods for tessellating minimal surfaces with square tiles, while considering the geometric and stability constraints of double layer tensegrity networks, are used to generate tensegrity structures of catenoid, helicoid, and enneper shapes. The developed algorithms and computational processes were applied and tested during the design and actual construction of three minimal surface tensegrity structures-installations, which were displayed in international exhibitions and will also be presented and discussed.

Program:
https://phd.uniroma1.it/web/seminar---minimal-surface-tensegrity-networks_nS5126EN_EN.aspx

Registration form:
https://docs.google.com/forms/d/e/1FAIpQLScbXRNLDKrof6-FnxLMmBCngfviyi62PfDC1sgggr7ZGqSHyw/viewform?usp=sf_link

Virtual room:
https://uniroma1.zoom.us/j/98271276509

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