## ADDITIVELY MANUFACTURED CONCRETE STRUCTURES



## AIM and SCOPE

The field of additive manufacturing (AM) of cementitious materials, particularly through 3D Concrete Printing (3DCP), is experiencing rapid growth within the construction industry. Significant advancements are being made in material science, production technologies, and the innovative design of high-TRL (Technology Readiness Level) projects. Currently, there is a critical need to establish a strong academic framework for researchers involved in the digital design-tofabrication process of cutting-edge 3D-printed structures. Advancing technological and engineering expertise in 3DCP not only enhances understanding within the construction sector but also maximizes the socio-economic and environmental advantages that arise from its efficient implementation. The main goal of this Summer School is to equip participants with advanced technical skills—spanning analytical, numerical, and practical 3DCP sessions—necessary for the design and construction of structures using 3DCP. The program features expert-led sessions by renowned guest lecturers, focusing on specific research topics and real-world applications of 3DCP. Additionally, it provides increased opportunities for students to engage actively with their own research. This initiative is designed to encourage meaningful exchanges and in-depth discussions, enriching participants' knowledge and enabling them to address the opportunities and challenges of 3DCP more effectively.

## INTERNATIONAL LECTURERS

Costantino Menna - University of Naples Federico II (Italy) Freek Bos - Technical University of Munich (Germany) Arnaud Perrot - Université Bretagne Sud (France) Jacques Kruger - Stellenbosch University (South Africa)

Check for updates: https://www.dist.unina.it/en\_GB/didattica/postdoc/summer-school







research and applications of additively manufactured structures

CONTACTS

LOCATION

**CHAIRS** 

Freek Bos

**Costantino Menna** 

**3<sup>rd</sup> INTERNATIONA** 

**MMER SCHOO** 

Bacoli - Naples, Italy

**FEDERICO II** 

Within the courses of the Ph.D. program in Structural & Geotechnical

Engineering and Seismic Risk

Villa Ferretti - Via Castello, 14

https://bacoli.it/visitare/monumenti/villa-ferretti.html

University of Naples Federico II

Technical University of Munich

WHO SHOULD ATTEND

researchers, practitioners interested in

Ph.D. students, postdoctoral

80070 Bacoli - Naples, Italy

MUR

July 14<sup>th</sup> – 18<sup>th</sup> 2025

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## PRE-REGISTRATION

Please note that the number of participants is limited, and pre-registration is required:

