UNIVERSITÀ DI PADOVA

Department of Industrial Engineering

UIT SEMINAR 2026

Additive Manufacturing for Thermal Science

23rd November, 2026



Dipartimento di Ingegneria Industriale –
Università degli Studi di Padova

Aula Seminari 3° Piano -
Via Venezia 1, 35131, Padova

Organizing committee

Prof: Simone Mancin and Dr: Giacomo Favero

Seminar Program

9:00 – 10:15	**TEI lab visit**
10:30 - 10:50	Welcome. **Prof. S. Rainieri** and **Prof. Simone Mancin**
10:50 – 11:20	**Invited talk** **M. Iasiello**, Università degli Studi di Napoli - Federico II, *Advances in Topology Optimization for Heat Transfer: The Road to Integrated Design*
11:20 - 11:40	**U. Neviani**, Università di Ferrara, Flow *Visualization in Additively Manufactured Enhanced Corrugated Tubes*
11:40 - 12:00	**A. Magnabosco**, Università degli Studi di Padova, *Development and Experimental Characterization of an Additively Manufactured Test Section for Condensation on Enhanced Surfaces*
12:00 - 12:20	**A. Fragnito** - Università degli Studi di Napoli - Federico II, *Shaping Heat and Flow: Multiscale Topology Optimization of Graded Porous Structures for Additive Manufacturing*
12:20 - 12:40	**A. I. Garivalis** - Università di Pisa, *Influence of Additively Manufactured Grids on Pool Boiling Heat Transfer and Critical Heat Flux*
12:40-13:00	**I. Marchi** - Università di Pisa, *Adaptive Thermal Management for Space Systems: Pool Boiling on Shape Memory Alloy Surfaces in Microgravity*
13:00 - 14:20	**Lunch**
14:20 - 14:40	**L. Pagliarini** - Università di Pavia, *Preliminary Development and Experimental Assessment of Three-Dimensional Pulsating Heat Pipes: From Conventional Tubular Geometries to Additive Manufacturing*
14:40 - 15:00	**S. Filippeschi** - Università di Pisa, *Experimental Investigation of Natural Convection Onset During PCM Melting in BCC Lattice Structures and Development of Melting Regime Maps*
15:00 - 15:15	**Coffe break**

15:15 - 15:35	**A. Mortazavi** - Politecnico di Torino, Performance *Enhancement of Latent Thermal Energy Storage Systems through Additively Manufactured Geometries*
15:35 - 15:55	**S. Cristiano** - Università di Modena-Reggio Emilia, *Experimental analysis of a Maisotsenko cycle counterflow TPMS heat and mass exchanger for cold storage applications*
15:55 - 16:15	**G. Favero** - Università degli Studi di Padova, *Experimental and Numerical Assessment of the Thermohydraulic Behavior of an Additively Manufactured Copper Prototype for Fusion Energy*
16:15 – 17:15	**Lab visit**