PRELUDE T9.5 | *educational event series*

5th lecture/conference meeting

Building monitoring, proactive control logic, and smart solutions

16th Jan 2024 | 14:30-16:45 (MET)

Virtual room link:
https://didattica.polito.it/VClass/PRELUDE_5thEDU_event
Physical room (Climate studio class):
Room 2P, Politecnico di Torino – Sede Centrale Cittadella, C.so Castelfidardo, 44 Turin (Italy) | MEng, students

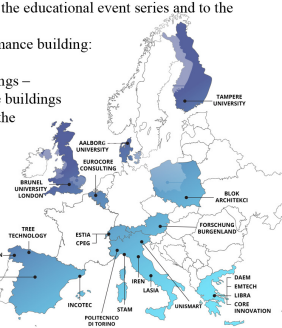
Abstract:

The PRELUDE project - Prescient building Operation utilising Real-Time data for Energy Dynamic Optimization – aims to support advanced innovative, smart, low-cost solutions supporting intelligent buildings and proactive optimisation services. Among the others, the project pursues the minimisation of energy uses, the maximisation of self-consumption and renewable sources balance, and the improvement of comfort conditions supporting the maximisation of free-running building potentials. This event is the fifth of a series of lectures/conferences on smart building issues, climate-free-running building design, and operational solutions. This lecture/conference focuses on building monitoring solutions, intelligent control technologies optimisations, and proactive control logic. Contents focus on lessons learnt, including PRELUDE project initial outcomes and external expert experiences. Results include demo buildings and living lab facilities in different countries. Speakers are recognised academic and professional experts in the topic.

Keywords: PRELUDE, proactive control logic, intelligent building, monitoring, lessons learnt

Programme:

14:30 | Giacomo Chiesa (POLITO, Italy) – Welcome and introduction to the educational event series and to the PRELUDE project
14:40 | Tristan de Kerchove (ESTIA, Switzerland) – High energy performance building: a challenge for monitoring and control
15:00 | Martin Frandsen (AAU, Denmark) – Monitoring of NZEB buildings – lessons learned from two direction communication from and to the buildings
15:20 | Michele Zinzi (ENEA, Italy) – Integrating smart technologies in the ENEA Living Lab: examples from field studies
15:40 | *small break*
15:50 | Angelo Zarrella & Enrico Pratavieri (UNIPD, Italy) – Sensitivity analysis on the best heating setpoint strategy for retrofitted residential buildings: a case study of with radiator systems
16:10 | Peter Klanatsky (FB, Austria) – Long-term test results of data-driven predictive control
16:30 | Q&A session



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The next two conferences/lectures of the educational event series will be organised in spring 2024 focusing on climate resilience in the built environment and on intelligent building, smart platforms, and digital twins.

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