



SAPIENZA
UNIVERSITÀ DI ROMA

FACULTY OF ARCHITECTURE

FACULTY OF CIVIL AND INDUSTRIAL ENGINEERING

DEPARTMENT OF STRUCTURAL AND GEOTECHNICAL ENGINEERING



DIGITAL INNOVATION

IN ARCHITECTURE AND ENGINEERING

Open talks on the impact of digitalization, hybrid realities, automation and communication technologies on civil engineering and architecture

NATO IRIS PROJECT FINAL MEETING

Inspection and security by Robots interacting with Infrastructure digital twins

October 15, 2024

Faculty of Architecture, via Emanuele Gianturco 2, Room G33

Google Meet: <https://meet.google.com/mky-jbds-dxy>

- 09:00 **Welcome speech and IRIS project achievement**
Vincenzo Gattulli (Sapienza University of Rome)
- 09:20 **Digital Twins in Architecture**
Spartaco Paris (Sapienza University of Rome)
- 09:40 **Robotic solutions for the IRIS cases of study**
Erika Ottaviano (University of Cassino and Southern Lazio)
- 10:00 **Automatic inspection of critical infrastructure with drones**
Konrad Wojtowicz (Military University of Technology)
- 10:20 **Long-term structural monitoring and digital twin of steel and glass structures**
Marianna Crognale, Cecilia Rinaldi (Sapienza University of Rome)
- 10:40 Coffee break
- 11:00 **Defects acquisition of Bytča road bridge**
Lucia Figuli (University of Zilina)
- 11:20 **Enhanced image processing and storage for defect evaluation in BIM of Bytča road bridge**
Dogan Karluklu (Sapienza University of Rome)
- 11:40 **The behaviour of dam Prince Moulay Abdellah during seismic events**
Amine Bendarma (Universiapolis-International University of Agadir), *Cecilia Rinaldi* (Sapienza)
- 12:00 **IoT and robot-aided sensing and data acquisition for digital twin update in structural health monitoring**
Luca De Vito (University of Sannio)
- 12:20 **Closing speech**
Vincenzo Gattulli (Sapienza University of Rome)

BEST DESIGN

