

# RAM&PHM 4.0: Advanced methods for Reliability, Availability, Maintainability, Prognostics and Health Management of industrial equipment

XXV Edition

Wednesday: 3 May 2023

## **OPENING OF THE COURSE**

9:00 – 10:30: *Introduction to the Course* E. Zio

## **MONTE CARLO SIMULATION**

10: 45– 12:30: *Monte Carlo simulation for system reliability and availability analysis*. E. Zio

13:30 – 15:30: *Exercise Session (MATLAB/PYTHON needed)*. G. Roma

## **FAULT DETECTION**

15:45 – 17:30: *Fault Detection methods*. I. Ahmed

Thursday: 4 May 2023

9:00 – 11:00: *Exercise Session (MATLAB needed)*. G. Floreale

## **FAULT DIAGNOSTICS**

11:15 – 12:45: *Fault diagnostics methods*. I. Ahmed

14:00 – 16:00: *Advanced topics in Fault Diagnostics*. P. Baraldi

16:15 – 17:30: *Exercise Session (MATLAB\* needed)*. C. Lai

Friday: 5 May 2023

9:00 – 10:30: *Exercise Session (MATLAB needed)*. C. Lai

## **FAULT PROGNOSTICS**

10:45 – 12:30: *Fault prognostics*. P. Baraldi

13:30 – 15:45: *Exercise Session (MATLAB needed)*. D. Valcamonico

16:00 – 17:00: *Closing: Challenges in RAM&PHM4.0*

\* at least MATLAB version 2018B with Deep Learning Toolbox installed