

Multi-modality data and foundation models for fault diagnosis and prognosis

Connecting multimodal AI, predictive maintenance and reliable embodied intelligence

17 November 2026 | 08:45-16:50

Room Sc. 071, Bouygues building, CentraleSupélec
3 rue Joliot Curie, 91190 Gif-sur-Yvette, France

This open workshop brings together researchers, students and practitioners to explore how multimodal data and foundation models can advance fault diagnosis, prognosis and predictive maintenance. By connecting time-series signals, images, text and other sources of information, these approaches open new possibilities for understanding system health and anticipating failures.

Invited talks will span controllable visual generation, image completion, medical diagnosis, rotating machinery and reliable embodied intelligence. Join us to exchange ideas on learning across modalities, handling incomplete data and translating advances in AI into dependable decisions and failure recovery.

Welcome breakfast, lunch and two coffee breaks are offered to on-site participants.

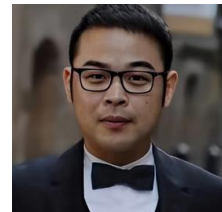
Confirmed speakers



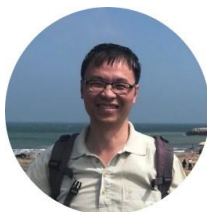
Ye Zhu
École Polytechnique



Olga Fink
EPFL



Jinming Duan
University of Manchester



Huiyu Zhou
University of Leicester



Konstantinos Gryllias
KU Leuven



Zhiguo Zeng
CentraleSupélec

Organizers

Prof. Anne Barros and Prof. Zhiguo Zeng
Chair on Risk and Resilience of Complex Systems,
CentraleSupélec, Université Paris-Saclay, France

Programme

Each invited talk includes a 40-minute presentation and 10 minutes of Q&A.

08:45-09:00	Welcome breakfast and arrival
09:00-09:50	Zhiguo Zeng CentraleSupélec <i>Leveraging Multi-modality Data and Foundation Models for Predictive and Prescriptive Maintenance: From Preventing to Recovering from Failures</i>
09:50-10:40	Olga Fink EPFL <i>From Tabular Foundation Models to Agentic AI for Prognostics and Health Management</i>
10:40-10:55	Coffee break (offered)
10:55-11:45	Ye Zhu École Polytechnique <i>Towards Fine-Grained Control of Large Multimodal Visual Generative Models</i>
11:45-12:35	Jinming Duan University of Manchester <i>Multimodal diagnosis in medical applications (tentative title)</i>
12:35-14:05	Lunch (offered)
14:05-14:55	Huiyu Zhou University of Leicester <i>Image completion with context-adaptive diffusion</i>
14:55-15:45	Konstantinos Gryllias KU Leuven <i>Multimodal diagnosis and prognosis for rotating machinery (tentative title)</i>
15:45-16:05	Coffee break (offered)
16:05-16:50	Round table (To be confirmed) <i>Challenges and opportunities of leveraging multi-modality data and foundation models for predictive maintenance in practice</i>

Registration and participation

Registration is mandatory but free for all participants, including those joining remotely, for logistical reasons. Please register so that attendance, catering and workshop arrangements can be planned.

Registration deadline: 8 November 2026.

Join us on site or remotely via Microsoft Teams. Welcome breakfast, lunch and both coffee breaks are offered to on-site participants.



[Register for the workshop](#)

Mandatory and free



[Join remotely via Teams](#)

Remote participants must also register, both on the left, and here.