Announcing the PHME24 Conference

Information and submissions at phm-europe.org

The Prognostics and Health Management Society invites your participation, including submission of original papers and posters, for presentation at the 8th European Conference of the PHM Society, **July 3rd to July 5th 2024**, a guaranteed in-person event in **Prague, Czech Republic**.

Building on our past success for PHME22 in Turin, attend and learn from keynotes and special sessions integrated with panels and tutorials. Follow those developments and data challenge, doctoral symposium and other high value content on **https://www.phm-europe.org**.

The conference will highlight the broad aspects of Prognostics and Health Management across all disciplines, technologies, and levels. Past participants came from: ABB Schweiz AG, Airbus, Alstom, Amazon, Austrian Institute of Technology, Baker-Hughes, Ben Gurion University of the Negev, Chalmers University of Technology, CNRS, Collins Aerospace, Concordia University, Cranfield University, Delft University of Technology, DLR, Dutch Rail, ECA, EDF, Flanders Make, GE, GM, GVB, Halmstad University, Honeywell, Huawei, Hyundai, IFSTTAR, IK-4 Tekniker, INP-ENIT, Inria, Irish Rail, IVHM Centre, KEPCO, KIMM, KITECH, KLM, Korea Aerospace University, KTH Royal Institute of Technology, KU Leuven, Linova, Lufthansa, Meggitt, Mercedes, Messier-Bugatti-Dowty, Mitsubishi, NASA, NI, NLR, Orsted, PARC, Politecnico di Torino, PREDICT, Prisma, PwC, Ricardo Rail, RK Diagnostics, Rolls Royce, Saab, Safran, Scania, Schlumberger, SKF, Snecma, Stratio, STMicroelectonics, Ureason and UTRC, Volkswagen AG, and many universities and public sector organizations.

Wonderful venues have been selected for enjoyable networking, sharing meals and savouring the bohemian culture and cityscape.

The proceedings for PHME22 are available at:
https://phm-europe.org/wp-content/uploads/2022/06/ProPHME22.pdf

Technical papers

Submissions are invited for papers for presentation and inclusion in the proceedings. Be part of an active network including students, managers, practitioners, and scientists from academia, government, and industry, from across the globe addressing the following topics:

PHM Design

- o Systems engineering aspects of PHM
- o PHM related standards & methodologies
- o PHM system structures & PHM Architectures
- o Uncertainty, explainability & causal Inference
- o Deep Learning/Machine Learning/Physics-Informed methods for PHM
- o PHM at the Component/Sub-system/System level

PHM Development

- o Physics of failure for anomaly detection, diagnostics and prognostics
- o Fault-adaptive control methods
- o Sensors & instrumentation
- o Model-based diagnostics
- o Data-driven, model-based & hybrid prognostics
- o Condition-based & predictive maintenance technologies
- o Software & hardware for PHM
- o Degradation modelling
- o PHM enabled Digital Twins
- o Testing & evaluation for PHM

PHM Applications

- o Asset health management
- o Structural health management
- o PHM for electronics & electrical engineering systems & plants
- o PHM in Cyber-Physical Systems
- o Cost Benefit & Return-on-Investment analysis
- o PHM for Automotive (including EV applications), Rail, Marine, Aerospace, Drones
- o PHM for sustainable systems, Wind energy
- o PHM for hydrogen applications
- o PHM for Manufacturing (Production planning and Control)
- o Deployed applications & success stories

Panels

Suggest titles and offer to organize one building on PHME24: PHM Standards in a Machine Learning Domain, Theoretical Aspects of Prognosis, PHM for Energy Generators, PHM for Electric Vehicles, Space, MRO, Human Performance, Scalability, Reliability, Use Cases, Uncertainty.

Student Track - Doctorial Symposium

For the third time in Europe a Doctorial Symposium will be run as part of a Student Track. This event provides an excellent opportunity for graduate students to present their research interests and plans at a formative stage in their research. The students will receive structured guidance from a panel of distinguished researchers, as well as comments from conference participants and fellow students in a collegial setting.

Short Courses- PHM Fundamentals, Data Analytics for PHM

We arranged a venue - Czech technical university in Prague - for these two well established courses. To help you prepare for the conference in Prague they will take place on the 1st and 2nd July. Details will be updated but they will follow the previous successful offerings at PHM20 and PHM22.

Data Challenge

After the past success of the Data Challenges, we intend to prepare another dataset for the European PHM Research Community. Winning teams will be invited to publish their work in the conference proceedings of the 8th European Conference of the PHM Society and a representative will be expected to make an oral presentation at the event.

Important Dates

Prospective authors are invited to contribute full length, original, high-quality papers. Accepted papers are guaranteed presentation at the event and inclusion in the proceedings. The highest quality submissions will also be directed to the International Journal of PHM (IJPHM) for consideration as a journal paper. IJPHM is listed in Web of Science's ESCI (Emerging Sources Citation Index), SCOPUS database, SJR listings, the Directory of Open Access Journals (DOAJ) and has also qualified for the SPARC Europe Seal.

Submit your abstract first and then your paper at the PHME conference page at:
https://phm-europe.org/submission-form.
Note, the submission portal is expected to be live October 2023.

Pacing dates are:
- Submission deadline: 18th December 2023
- Notification of Acceptance of Abstract: 15th January 2024
- Submission of full papers and posters: 11th March 2024
- Submission deadline for Doctoral Symposium: 1st April 2024
- Notification of acceptance for Doctoral Symposium: 15th April 2024
- Paper review feedback: 15th April 2024
- Final paper or poster due: 13th May 2024
- Final camera-ready papers to be submitted: 3rd June, 2024.

All accepted papers will be published in the PHME24 conference proceedings

Why you want to be there

PHM Europe 2024 will feature keynote presentations from PHM leaders, high quality presentations of research papers, industry and student poster presentations, panel sessions as well as special technical sessions and optional short courses. Great networking and social events too. We will run a new data challenge competition and a doctoral student symposium.

Submitted papers will be reviewed by experts based on the criteria of originality, significance, quality, and clarity. A major differentiator for the PHM Society is its modern approach to intellectual property rights. Authors retain copyright in their work while allowing the PHM Society to distribute their work through a Creative Commons License. As a result, all articles published by the PHM Society are available to the global PHM community via the internet free and without any restrictions (other than attribution).

Selected papers will be invited for publication on International Journal of Prognostics and Health Management the open access online journal for the global PHM community (www.phmsociety.org).

Please plan to join us today by submitting an abstract and then a paper. We also invite ideas and participation in any and all activities of the conference including, but not limited to, submission of ideas for special paper sessions and panel leads.

See you there