Announcing the PHME22 Conference

The Prognostics and Health Management Society invites your participation, including submission of original papers and posters, for presentation at the 7th European Conference of the PHM Society, July 6th to July 8th, a guaranteed event which we hope to be an in-person event in Turin Italy.

Building on our past success with 282 participants for PHME20, and 142 in 2021, attend and learn from keynotes peer-reviewed papers and special sessions integrated with panels and tutorials. Follow those developments and the data challenge, doctoral symposium and other high value content at: 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: Airbus, Alstom, Amazon, Baker Hughes, Dutch Rail, ECA, GE, GM, Honeywell, Huawei, Hyundai, IFSTTAR, IK-4 Tekniker, Irish Rail, KEPCO, Linova, Lufthansa, Meggitt, Mercedes, Messier-Bugatti-Dowty, Mitsubishi, NI, Orsted, PARC, PREDICT, Prisma, PwC, Ricardo Rail, RK Diagnostics, Rolls Royce, Saab, Safran, Scania, Schlumberger, SKF, Snecma, STMicroelectronics, Ureason and UTRC, and many universities and public sector organizations, like CNRS, DLR, EDF, GVB, Inria, IVHM Centre, KIMM, KITECH, NASA, NLR.

Wonderful venues have been selected for enjoyable networking, sharing meals and savouring the Turin culture and cityscape. We will maintain a watch on the Covid situation and post any relevant updates on the conference web-site at www.phm-europe.org

The proceedings for PHME21 (*) are available at:
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
- Systems engineering aspects of PHM
- PHM related standards and methodologies
- PHM Design and PHM Architectures
- Uncertainty, Explainability and Causal Inference
- Deep Learning/Machine Learning methods for PHM
- PHM at the Component/Sub-system/System level

PHM Development
- Physics of failure for anomaly detection, diagnostics and prognostics
- Fault-adaptive control methods
- Prognostics sensors and detection
- Fault detection and prognostics of MEMS
- Model-based diagnostics
- Data-driven, model-based and hybrid prognostics
- Condition-based and predictive maintenance technologies
- Software and hardware for PHM
- Degradation modelling

PHM Applications
- Asset health management
- Structural health management
- PHM for electronics and electrical engineering systems and plants
- PHM in Cyber-Physical Systems
- Cost Benefit and Return-on-Investment analysis
- PHM for Automotive, Rail, Marine, Wind and Energy
- PHM for Manufacturing (Production planning and Control)
- Deployed applications and success stories

Panels
**Student Track - Doctorial Symposium**

For the second 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**

Our local sponsors on Turin have arranged an amazing venue - a former palace - for these two well established courses. To help you prepare for the conference in Turin they will take place 4th and 5th July. Details will be updated but they will follow the previous successful offerings at PHM20 and PHM21.

**Data Challenge**

After the success of the Data Challenge in 2020 and 21, 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 7th 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/registration](https://phm-europe.org/registration).

Note, the submission portal is expected to be live 3rd Jan 2022.

Pacing dates are:

- Submission of abstracts by **January 28th, 2022**
- Notification of Acceptance of Abstract by **February 4th, 2022** (Submit early and hear back early)
- Submission of complete papers and posters by April 3rd, 2022
- Paper review feedback: May 2nd, 2022 (Submit early and hear back early)
- Final paper or poster due: May 16th, 2022
- Final camera-ready papers to be submitted by 20th June 2022.

All accepted papers will be published in the PHME22 conference proceedings.
Why you want to be there

PHM Europe 2022 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. Look at the excellent content from the past conference at fourth european conference of the prognostics and health management society 2018 - PHM Society and PHME21 – PHM Europe 2021 (phm-europe.org)

*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