

## FIRST CALL FOR PAPERS

### 2017 Prognostics and System Health Management Conference-Harbin, China (PHM-2017 Harbin)



Following a series of successful PHM conferences in the past few years, 2017 Prognostics and System Health Management Conference-Harbin (PHM-2017 Harbin) will be held in Harbin, China, from July 9-12, 2017. PHM-2017 Harbin is sponsored by Harbin Institute of Technology (HIT), IEEE Reliability Society, and IEEE Harbin Section. PHM-2017 Harbin will continually provide a premier interdisciplinary forum for researchers, scientists and scholars in the domains of aeronautics and astronautics, energy and power systems, process industries, computers and telecommunications, and industrial automation to present and discuss the most recent innovations, trends, concerns, challenges, and solutions in PHM. All the accepted papers will be published in IEEE Xplore and indexed by Engineering Index (EI).

#### Topics of Interest

**PHM-2017 Harbin** is seeking original papers for presentation at the conference. Researchers and participants from academia, industry and government organizations are invited to submit papers on the following topics:

Principles	Systems Design & Implementation	Applications
<ul style="list-style-type: none"> <li>Ø Physics of failure</li> <li>Ø Sensors and devices</li> <li>Ø Structural sensing</li> <li>Ø Modeling and simulation</li> <li>Ø Data-driven methods</li> <li>Ø Model-based methods</li> <li>Ø Multi-sensor fusion principles</li> <li>Ø Logic/reasoning techniques</li> <li>Ø Verification, validation, and maturation</li> <li>Ø Benchmarking</li> <li>Ø Affordability aspects and business cases for PHM</li> <li>Ø Standards and methodologies</li> </ul>	<ul style="list-style-type: none"> <li>Ø Requirements development</li> <li>Ø System design &amp; engineering</li> <li>Ø Automated reconfiguration</li> <li>Ø Statistical analysis of uncertainty</li> <li>Ø Component-level PHM</li> <li>Ø Nondestructive evaluation technologies with PHM utilization</li> <li>Ø Decision support &amp; simulation</li> <li>Ø PHM computer-aided engineering technologies/ applications</li> <li>Ø Integrated structural/frame health management</li> </ul>	<ul style="list-style-type: none"> <li>Ø PHM within power smart grid technology</li> <li>Ø PHM within distributed, networked &amp; cloud computing</li> <li>Ø PHM for electronics components and systems</li> <li>Ø PHM within innovative aerospace and defense, appliance, medical, electric vehicle, deep drilling, and energy applications</li> <li>Ø Fleet/industrial PHM-based maintenance management</li> <li>Ø Informed logistics</li> <li>Ø Lessons learned from PHM systems design and integration</li> </ul>

With the developments of German Industries 4.0, Industrial Internet of the U.S., and China Manufacturing 2025, the global manufacturing industry is facing a crucial transformation. As the systems become more complex, higher standards on reliability and safety are required. The theme of PHM-2017 Harbin is PHM for new industry architecture. At the conference, Industrial Big Data, Internet of Things (IoT), Cyber-Physical Systems (CPS), etc., are part of the main focuses. Researchers and practitioners in academia and related industries are cordially invited to join us.

## CALL FOR SPECIAL SESSION PROPOSALS

In addition, proposals for Special Sessions are welcomed. Prospective organizers of special sessions should submit proposals indicating:

- ✧ Title of the proposed session.
- ✧ Motivation and objectives of the session, emphasizing the benefits for PHM-2017 Harbin.
- ✧ Short biography of the organizer (up to two) with complete address, and additional contact information.
- ✧ List of at least 6-8 prospective papers with titles, coauthors, and contact information of corresponding authors.
- ✧ Submissions to a special session must be reviewed by the session organizer(s) and the conference's Review Group. The due date for Special Session Proposal is **February 25, 2017**.

## Paper Submission

Submit a full manuscript (max. 6 pages) including coauthors' names, affiliations, and complete email addresses. All papers should be submitted electronically in PDF or Word, by **March 15, 2017**, through the conference website.

## Important Dates:

<b>Abstract Submission Due (optional):</b>	<b>15 February, 2017</b>
<b>Abstract Acceptance:</b>	<b>25 February, 2017</b>
<b>Full Paper Submission Due:</b>	<b>15 March, 2017</b>
<b>Notification of Acceptance:</b>	<b>15 April, 2017</b>
<b>Camera-ready Paper Due:</b>	<b>30 April, 2017</b>
<b>Conference Date:</b>	<b>9-12 July, 2017</b>

## What is New about PHM-2017 Harbin

- ✧ Chinese forum on PHM applications and development
- ✧ Workshop on academy and industry
- ✧ Seminars on PHM new algorithms and models

*For more exciting news, please continuously pay attention to [www.phm2017.org](http://www.phm2017.org) and WeChat (coming soon).*

**To make PHM 2017 more open and diverse, researchers and scholars are welcome to join or contribute to the conference committee and organize special sessions.**

**Further information (Conference website):**

**[www.phm2017.org](http://www.phm2017.org)**

**Contact the PHM2017 organizer:**

**[phm2017@hit.edu.cn](mailto:phm2017@hit.edu.cn)/[phm2017@126.com](mailto:phm2017@126.com)**