



Call for Papers
Call for Tutorials
Call for Data Challenge
Call for Panel Sessions
Call for Technology Demonstrations
Call for Doctoral Symposium Applications

Oct 1-6, 2016
Embassy Suites
Downtown Convention
Center
Denver, Colorado, USA

IMPORTANT DATES

Key Paper Dates:

Abstract Submission Due
- May 13, 2016
Paper Submission Due
- June 10, 2016
Paper Review Feedback
- July 15, 2016
Final Papers Due
- August 05, 2016

Key Submission Dates:

Doctoral Symposium
- May 09, 2016
Panel Session Interest
- June 3, 2016
Technology Demos
- June 10, 2016

CONFERENCE MANAGEMENT TEAM

Conference Chair

David Larsen
UTC Aerospace Systems
Karl Reichard
Penn State University

Conference Advisor

Rhonda Walthall
UTC Aerospace Systems

Sponsorship

Lead: Pat Kalgren
Impact Technologies
Carl Byington
Impact Technologies
Jeff Bird
TECNos

8th Annual Conference of the Prognostics and Health Management Society October 3-6, 2016

PHM Short Course: October 1-2, 2016
Doctoral Symposium: October 2, 2016

www.phmconference.org

This Eighth Annual Conference of the PHM Society will bring together the global community of PHM experts from industry, academia, and government in diverse application areas such as energy, aerospace, transportation, automotive, and industrial automation. In addition to technical paper sessions, the conference will also feature workshops, town hall meetings, hands-on demonstrations, panel sessions, a dedicated session on fielded systems, a doctoral symposium, and tutorials free to all registrants. A PHM data analysis competition will be carried out in parallel and the results will be discussed during the conference. Leading companies and research institutions will exhibit their products and demonstrate their technologies during the event. Several social events will provide opportunities for participants to connect with colleagues. The PHM Society will also offer a separate, dedicated short course focused on fundamental PHM concepts and techniques before the start of the main conference.

A major differentiator for the PHM Society is its modern approach toward 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 for free and without any restrictions.

CALL FOR PAPERS

Prospective authors are invited to contribute full length, original, high-quality papers. The topics suggested by the conference can be categorized as analysis methods, asset-specific algorithms, prototype implementations, fielded systems, and business case analysis. Both research and industry contributions are welcomed. Submitted papers will be reviewed by experts based on the criteria of content, significance, technical validity, innovation, writing style, accuracy, clarity, simplicity and readability. More details can be [found here](#).



Keynote/Luminaries

Andy Hess
Hess PHM Group
Karl Reichard
Penn State University
Ramasamy Poongavanam
UTC Aerospace Systems

Technical Program

Lead: Peter Beling
University of Virginia
Lead: Seth Kessler
Metis Design
Dustin Garvey
Oracle
Chetan Kulkarni
NASA
Ravi Rajamani
Meggitt
David Siegel
Predictronics
Christopher Teubert
NASA

Proceedings

Anibal Bregon
University of Valladolid
Matthew Daigle
NASA

Panel Sessions

Chair: Brian Weiss
NIST
Jeff Bird
TECnos
Greg Bower
QorTek
Steve Holland
General Motors
Jeremy Marvel
NIST
David Siegel
Predictronics
Rune Schlanbusch
Teknova
Junda Zhu
Renewable NRG Systems

Topics of Interest:

- Advanced Sensing & Embedded Devices
- Adaptive Control & Fault Accommodation
- Autonomous Systems / Robotic Technologies
- CBM Return on Investment Analysis & Business Case
- Cloud-scale Analytics
- Corrosion
- Data Driven Approaches
- Decision Support Systems
- Detection, Diagnostics & Prognostics Methods
- Human-centric PHM
- Marine, Automotive, Aviation Applications
- Mining Applications
- Oil & Gas
- Physics of Failure & Model Based Prediction
- Smart Grid
- Smart Manufacturing
- Standards, Metrics, and V&V
- Wind Energy

Please Note: No extensions will be provided for the submission deadline. Authors will be required to submit their papers by the deadline to allow enough time for the review process.

CALL FOR PANEL SESSION SPEAKERS

Prospective panelists are invited to contribute to a panel discussion with others speakers who have expertise in a specific topic. Each panelist will provide remarks for 10-15 minutes and then participate in a Q&A session with the audience. Ideas for new panels are also welcome. For more information, please contact [Brian Weiss](#).

Topics of Interest:

- Applications
- Autonomous Vehicles / Robotics
- Aerospace
- Automotive
- Data Science / Big Data
- Medical Equipment
- Military / Army CBM
- Railway / Transportation
- Smart Manufacturing
- Standards
- Wind Energy
- Wireless Technology



PHM Data Challenge

Justinian Rosca
Siemens

Tutorials

George Vachtsevanos
Georgia Tech
Kai Goebel
NASA Ames

Short Course

Neil Eklund
Schlumberger
George Vachtsevanos
Georgia Tech
Jeff Bird
TECnos

Technology Demonstrations

Jim Larkin
Aerojet Rocketdyne
Michael Usrey
Sporian

Poster Session

Chair: George Gorospe
NASA
Bin Zhang
University of South Carolina

Conference Career Fair

Abbas Chokor
Arizona State University

Education & Professional Development

Jeff Bird
TECnos
Karl Reichard
Penn State University

SWE Outreach

Angie Patterson
GE Analytics
Brinda Thomas
Tesla Motors

CALL FOR PHM DATA CHALLENGE PARTICIPANTS

The PHM Society invites participants to compete in a data challenge to find the best solution to a PHM-related problem. Collaboration is encouraged. The top scoring teams will be invited to present their solution at the conference. For more information, please contact [Justinian Rosca](#).

CALL FOR TUTORIALS

The PHM 2016 Conference tutorials should provide a comprehensive introduction to the state-of-the-art in the tutorial's topic. Proposed tutorials must address the interests of a varied audience: beginners, developers, designers, researchers, practitioners, and decision makers who wish to learn a given aspect of prognostic health management.

Topics of Interest:

- Asset Health Management
- CBM Policies
- Cost-Benefit Analysis
- Diagnosis and Fault Isolation Methods
- Life Cycle and Risk Management Methodologies
- PHM System Design and Engineering
- Standards and Methodologies

Please contact [George Vachtsevanos](#) or [Kai Goebel](#) if you are interested in giving a tutorial.

CALL FOR TECHNOLOGY DEMONSTRATIONS

The PHM Society invites participants to show off their diagnostic and prognostic engineering approaches through PHM technology demonstrations. The concept of the demonstrations is to offer a true "hands-on" learning experience for attendees. Multiple demonstrations will be given as brief tutorials to small groups over a two-day period. Each demo will last for approximately 30 minutes, where attendees will be encouraged to actively participate. Details can be [found here](#). For more information, contact [Jim Larkin](#).

Topics of Interest:

- Certification and Validation Techniques for Health Management Applications
- Fielded Prognostic or Advanced Diagnostic Systems
- Innovative System Maintenance Approaches
- Rapid Aging Testing and Analysis Techniques
- Sensors and Sensor Integration for PHM
- System Identification Processes to Support PHM Goals

Please Note: Demonstration hardware, concepts, material, data, etc., must be cleared for public release.



University Outreach
George Vachtsevanos
Georgia Tech

Doctoral Symposium
Jamie Coble
University of Tennessee

Student Activities
Abbas Chokor
Arizona State University

Special Session
Greg Bower
QorTek

SAE Liaison
Rhonda Walthall
UTC Aerospace Systems

Conference Materials
Scott Clements
Lockheed Martin
Aeronautics

Conference Finances
Karl Reichard
Penn State University

Website Development
Scott Clements
Lockheed Martin
Indranil Roychoudhury
NASA

Publicity
Rhonda Walthall
UTC Aerospace Systems

CALL FOR DOCTORAL SYMPOSIUM APPLICATIONS

The PHM Society Doctoral Symposium will be held as a workshop on Sunday, October 2. Full-time students are invited to submit their thesis ideas to the Doctoral Symposium. It provides an 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. More details can be [found here](#).

SPECIAL SESSION ON PHM FOR HUMAN ASSETS

Papers are solicited in areas that relate to PHM of and about humans. For more information, please contact [Wolfgang Fink](#).

Topics of Interest:

- Novel wearable smart sensor development and deployment
- Sensor-data-fusion algorithms
- Anomaly detection algorithms
- Machine learning and data mining techniques
- Predictive/diagnostic algorithms
- (Crew) Electronic Health Records (CEHR) and associated database development

Sincerely,

David Larsen and Karl Reichard
General Chairs
Annual Conference of the PHM Society 2016