Special Issue

Predictive Maintenance for Complex Systems—from Sensor Measurements to Prognostics to Maintenance Planning

Message from the Guest Editors

This Special Issue focuses on advancements in predictive maintenance for complex systems where maintenance tasks are planned based on Remaining-Useful-Life (RUL) prognostics, anomaly detection, and/or the availability of spare components. Objectives to be considered are, for example, the minimization of maintenance costs, reliability guarantees, the minimization of asset downtime, and the efficient usage of spare parts. Research on the development of optimization models for predictive maintenance planning and simulations to evaluate the impact of prognostics on maintenance objectives are highly encouraged. Work on the development of probabilistic RUL prognostics and stochastic optimization for maintenance planning is also encouraged. Contributions on the development of Remaining-Useful-Life prognostics and diagnostics (modelbased/machine learning/physics-based) are very welcome, together with discussions on the integration of these results into maintenance planning. Applications to be considered are, for example, aircraft systems, wind turbines, engines, and actuators.

Guest Editors

Dr. Mihaela A. Mitici

Dr. Matteo Davide Lorenzo Dalla Vedova

Dr. Adam F. Abdin

Prof. Dr. Anne Barros

Deadline for manuscript submissions

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Aerospace
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
aerospace@mdpi.com

mdpi.com/journal/ aerospace





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Editor-in-Chief

Prof. Dr. Konstantinos Kontis

School of Engineering, University of Glasgow, James Watt Building South, University Avenue, Glasgow G12 8QQ, Scotland, UK

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