**Special Session on Reliability of mission-critical systems**

In mission-critical fields, e.g., infrastructure, manufacturing, aviation, and high-level national security, the rapidly growing and continuous evolution of technology has made products and processes increasingly complex. Such products and processes are designed to meet advanced functional and reliability requirements, and unexpected failures during a mission may lead to catastrophic consequences. Therefore, the reliability of such mission-critical systems is of utmost importance.

Topics of interest include (but not limited to):

* Failure mode and effects analysis (FMEA)
* Reliability modelling and analysis
* Reliability-based design optimization (RBDO) methods;
* Risk analysis and reliability assessment for mission-critical systems;
* Reliability test design
* Statistical methods for degradation modelling
* Physical-based/data driven prognostics and health management (PHM) techniques
* Machine learning techniques and applications in reliability engineering
* Uncertainty quantification and analysis for safety-critical systems

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| Prof. Lechang Yang  University of Science and Technology Beijing, China  Email: yanglechang@ustb.edu.cn | Prof. Ping Jiang  National University of Defense Technology, China  Email: jiangping@nudt.edu.cn | Prof. Huchen Liu  Tongji University, China  Email: huchenliu@tongji.edu.cn |