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MATHEMATICAL PROBLEMS IN AEROSPACE SCIENCE TRACK 700

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ABSTRACT

Mathematical Problems in Aerospace Science Symposium focuses on new results of aerospace science researches carried out by using mathematical techniques. The aim of the Session is to collect relevant papers dealing with important approaches of applied mathematics, which have relevance to the engineering in the field of Aerodynamics and Fluid dynamics, Propulsion, Materials and Structures, Aerospace Systems, Flight Mechanics and Control, Space Systems and Missions in order to create new collaborations between mathematicians and aerospace engineers. Papers must be characterized by innovative models, methods and approaches that can found practical application to the engineering field or by new useful application of existing models to solve engineering problems. The Symposium will be characterized by a multidisciplinary nature that, by means of a common need for mathematical and numerical models, can invite authors involved in the implementation of mathematical and numerical approaches with applications in different engineering areas including but not limited to:
Flight Mechanics; Aircraft Design; Flight Tests; Aircraft flight control systems; Structures and Materials; Damage and Fracture Mechanics; Smart Structures and Materials; Computational Mechanics; Fluid dynamics; Computational Fluid Dynamics; Aircraft Transportation; Air Traffic Management; Aircraft Guidance Navigation and Control; Aircraft Systems and Equipments; Sensors and Actuators; All-Electric Aircraft advancements; Aircraft Maintenance and Failure Analysis; Propulsion Systems; Flight Simulation; Aviation Human Factor; Space Exploration and Missions; Space Engineering and Technology; Green Aviation; Noise control; Aeroelasticity; Avionics; Optimization; Control and Identification.