



Editorial

Special Issue: Mechanisms, Transmissions, and Applications

This special issue of the ASME *Journal of Mechanisms and Robotics* (JMR) draws on papers presented at the 6th IFToMM International Conference on Mechanisms, Transmissions, and Applications (MeTrApp 2023), held in Poitiers, France in May 2023. This meeting provided an opportunity for researchers from around the world to convene and discuss topics related to mechanisms and machines and to present their latest research results spanning from design to analysis to application. By gathering a number of papers based on topics presented at the conference in this special issue, we hope to benefit the research community and the readership of JMR.

The majority of papers in this special issue were invited based on the quality of the work presented at the MeTrApp conference. All papers were extended and were newly reviewed according to JMR's established process. In addition to papers from MeTrApp, an open call for papers produced additional submissions within the related theme of mechanisms, transmissions, and applications.

The papers included in this special issue address theoretical topics such as sensitivity analysis of robots, mechanism synthesis, and screw theory for robot analysis, as well as applied topics such as robotic throwing, satellite docking, speed reducers, and variable stiffness mechanisms. We wish to thank the authors who have contributed their very interesting work to this compilation of papers

linked to the theme of mechanisms, transmissions, and applications. We also thank the reviewers and staff who have devoted their time and attention to ensuring the quality of this collection. We hope that the reader will find these articles stimulating and inspirational for advancing the state of the art in mechanisms and robotics research moving forward.

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