
Towards compliant robotics in large and small scale

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Résumé

Résumé: *In modern robotics, several trends can be observed such as collaborative, service, exoskeleton, and miniature robotics. In all these cases, interaction with the environment is a critical aspect. This talk will discuss several strategies to fundamentally rethink robotic technology to make it intrinsically better suited to these new fields of robotics. Basic techniques such as static and dynamic balancing will be reviewed, and preliminary results towards structurally compliant robots will be presented and openly discussed.*

Bio: *Just Herder is a full professor of Interactive Mechanisms and Mechatronics at Delft University of Technology (0.8 fte) and of Mechanisms and Robotics Design at the University of Twente (0.2 fte). He has widely published in international peer-reviewed journals and conferences and has received several international awards. He is an ASME fellow, Executive Committee member and Treasurer of IFToMM, board member of several international conferences, associate editor of Mechanism and Machine Theory, and Editor-in-Chief of Mechanical Sciences. Six start-up companies have emerged from his research and he holds over a dozen international patents in different areas of mechanism design. He held visiting positions at Laval University, Canada, and at MIT, USA, as a Fulbright Visiting Scholar.*

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