



INDIAN INSTITUTE OF TECHNOLOGY MANDI

भारतीय प्रौद्योगिकी संस्थान मंडी

Institute Colloquium

“Selected Possibilities of Realizing Compliant Robotic Systems Based on Tensegrity Structures”



04th September,
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Auditorium,
North Campus

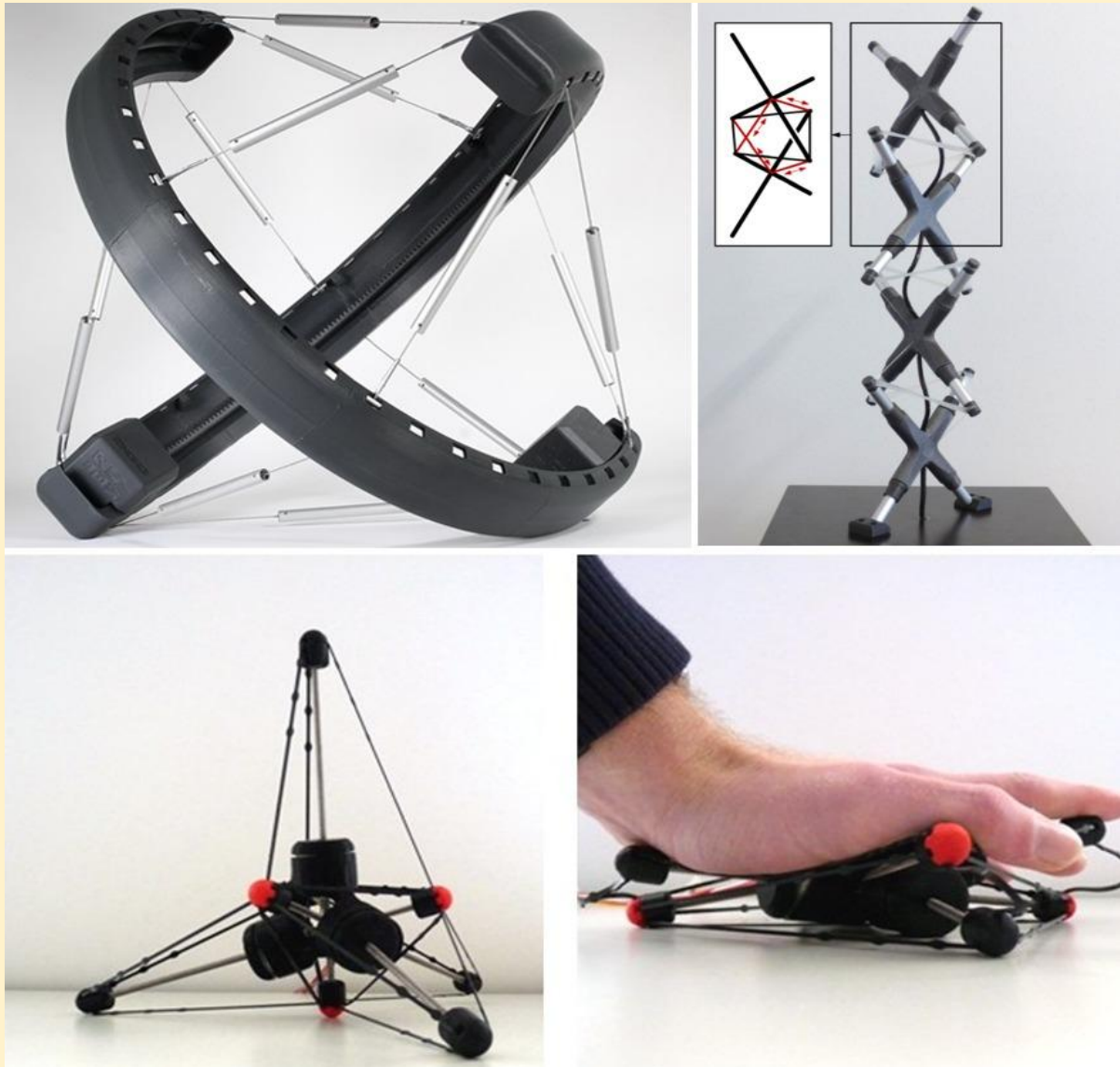
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Selected Possibilities of Realizing Compliant Robotic Systems Based on Tensegrity Structures

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Abstract: -

The presentation explores selected possibilities of realizing compliant robotic systems based on tensegrity structures. Tensegrity, characterized by a balance of tension and compression members, enables lightweight yet highly flexible designs. Such systems offer inherent shock absorption and adaptability. Potential applications in mobile robotics, soft manipulation, and bio-inspired systems will be outlined. Furthermore, the benefits and limitations of employing tensegrity principles in robotic design are critically assessed.

Bio-Sketch: -

Prof. Böhm has an extensive academic background, with studies in mechanical engineering at TU Budapest, Karlsruhe, and Ilmenau, and a PhD in 2005 on bio-inspired monolithic joints with fluid-powered actuation. His habilitation in 2016 focused on the mechanics of tensegrity structures and their applications in mobile robotics. Since 2018 he has been a faculty member at OTH Regensburg, where his teaching and research span tensegrity mechanics, mobile robotics, and finite element analysis.

For more Information: Please visit the link;

<https://www.oth-regensburg.de/personen/detailansicht/valter-boehm>
