Technische Universität Wien
Institut für Diskrete Mathematik und Geometrie

Einladung

zu einem

Vortrag

von

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*A Unified Approach to Direct Kinematics of some Reduced Motion
Parallel Manipulators*

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Abstract: After discussing the Study point transformation operator, a unified way to formulate kinematic problems, using "points moving on planes or spheres" constraint equations, is introduced. Application to the direct kinematics problem solution of a number of different parallel Schönflies motion robots is then developed. A novel two legged architecture is revealed to emphasize that good design is not only essential to good performance but also to easily solved kinematic models. These constraints and tools are also applied to some special parallel robots called "double triangular" to show that the approach is flexible and universally pertinent to manipulator kinematics in reducing the complexity of some previously achieved solutions.

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