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**UNIVERSITÄT
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ZUKUNFT
SEIT 1386

STRUCTURES JOUR FIXE

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“Constrained Optimization on
Manifolds”

November 18, 2022 1:30 PM

**HYBRID: Great lecture hall in Philosophenweg 12 and
Zoom. Meeting ID: 935 6549 3662, Code: 928036
Contact: office@structures.uni-heidelberg.de**



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ABSTRACT

Optimization problems in nonlinear spaces and in particular, on (Riemannian) manifolds, represent an area of growing interest with many applications in computer vision, statistics, matrix and tensor representations, and geometric learning. In contrast to problems in Euclidean spaces, however, optimization problems on manifolds are often considered without constraints.

In this presentation, we address the (partially philosophical) question how to generalize constrained optimization to manifolds. In particular, we address the question: What are manifold-valued inequality constraints?

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