

Call for talks and proceedings papers

Geometric numerical integration

Young Researchers Minisymposium at NUMDIFF-16

organised by

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On the occasion of the Conference on the Numerical Solution of Differential and Differential-Algebraic Equations (NUMDIFF-16), that will be organized by Martin Luther University Halle-Wittenberg (Germany) from 6 September to 10 September 2021, we are organizing the mini-symposium “THREAD - Geometric numerical integration” as fellows of THREAD ETN (<https://thread-etn.eu/>).

Among the topics we would like our mini-symposium to include are investigation of geometric methods for time integration of constrained rod systems, model reduction methods and numerical methods for inelastic Cosserat rods. Moreover, research in the fields of Lie group time integrators, energy-momentum methods and variational integrators that preserve the essential structure and key invariants of certain models is of interest. Also more specific topics like stability of simulation results despite the extreme sensitivity of slender rod models to loading conditions and numerical disturbances, and adaptive discretisation methods are relevant, but we are open to consider other contributions generally related to geometric numerical integration.

This mini-symposium is a good opportunity for young researchers to present something even at the early stages of their work. Participants are also invited to submit a conference proceedings for publication in the Journal of Computational and Applied Mathematics after going through a peer-review process.

Link to the conference: <https://sim.mathematik.uni-halle.de/numdiff/Numdiff16/>

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