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Seminar über Fragen der Mechanik

zu folgendem Vortrag wird herzlich eingeladen

Mittwoch, **06.03.2019, 09:30 Uhr**, Immerwahrstr. 1, Raum 01.025

A variational derivation of forced Euler-Lagrange and Euler-Poincaré equations and applications to error analysis

Rodrigo T. Sato Martín de Almagro, ICMAT, Madrid
(joint work with David Martín de Diego)

In this talk, we will discuss a variational derivation of the forced Euler-Lagrange and Euler-Poincaré equations based around the work of [1], [2]. We will take a look at some of the geometry behind it and talk about its application to the construction and analysis of geometric integrators for forced systems [3].

References

- [1] Chad R. Galley
Classical mechanics of nonconservative systems
Phys. Rev. Lett., 110:174301, Apr 2013.
- [2] Chad R. Galley, David Tsang, and Leo C. Stein
The principle of stationary nonconservative action for classical mechanics and field theories.
2014
- [3] David Martín de Diego and Rodrigo T. Sato Martín de Almagro
Variational order for forced lagrangian systems.
Nonlinearity, 31(8):3814–3846, Jul 2018.

Prof. Dr.-Ing. P. Steinmann
Prof. Dr.-Ing. K. Willner

Lehrstuhl für Technische Mechanik
Egerlandstraße 5, 91058 Erlangen

Prof. Dr.-Ing. S. Leyendecker

Lehrstuhl für Technische Dynamik
Immerwahrstraße 1, 91058 Erlangen