

Announcement of the Symposium on
Conservative and Dissipative Integrators in Computational Dynamics

Sixth U.S. National Congress on Computational Mechanics, August 1-4, 2001
Hyatt Regency Dearborn, Dearborn, Michigan, USA, <http://www.usnccm.org>

Symposium Organizers: P. Betsch, P. Steinmann and T.J.R. Hughes

Recent years have witnessed an increasing interest in the design of integration schemes for non-linear dynamical systems. In this context the algorithmic conservation of fundamental invariants pertaining to the underlying continuous system as well as controlled numerical dissipation have been main issues, especially with regard to robust and accurate integrators. Thereby, a number of different approaches such as discrete gradient methods, variational integrators, continuous and discontinuous Galerkin methods have been proposed. The goal of this Symposium is to provide a forum for the presentation and discussion of the different approaches.

Topics of interest in the Symposium include:

- Methodological approaches, e.g.:
 - Discontinuous and continuous Galerkin methods
 - Discrete gradient methods
 - Discrete variational methods
- Applications, e.g.:
 - Conservative dynamical systems
(e.g. nonlinear elastodynamics)
 - Dissipative dynamical systems
(e.g. inelastic material behavior)
 - Constrained dynamical systems
(e.g. coupling of rigid and flexible bodies)

If you are interested in contributing to this Symposium, please submit an abstract to the Symposium **contact person** following the abstract submission information as described in the USNCCM web site.

Symposium Organizers

P. Betsch & P. Steinmann (**contact person**)
Lehrstuhl für Technische Mechanik
Universität Kaiserslautern
Postfach 3049
D-67653 Kaiserslautern
Germany
email : ps@rhrk.uni-kl.de

T.J.R. Hughes
Mechanics and Computation
Durand Building
Stanford University
Stanford, CA 94305
USA