



FAKULTÄT FÜR MATHEMATIK, INFORMATIK UND PHYSIK
LEOPOLD-FRANZENS UNIVERSITÄT INNSBRUCK
INSTITUT FÜR MATHEMATIK



Technikerstrasse 13/7
A-6020 Innsbruck
Telefon: +43 512 507 6071 oder 6097

E-Mail: mathematik@uibk.ac.at
<http://www.uibk.ac.at/mathematik/>
Fax: +43 512 507 2920

MATHEMATIKKOLLOQUIUM

Das Institut für Mathematik lädt zu folgendem Vortrag ein:

Univ.-Doz. Dr. Othmar Koch

Technische Universität Wien

Analysis of a Defect Correction Method for Geometric Integrators

We discuss a new variant of Iterated Defect Correction (IDeC), which increases the range of applicability of the method. Splitting methods are utilized in conjunction with special integration methods for Hamiltonian systems, or other initial value problems for ordinary differential equations with a particular structure, to solve the neighboring problems occurring in the course of the IDeC iteration. We demonstrate that this acceleration technique serves to rapidly increase the convergence order of the resulting numerical approximations, up to the theoretical limit given by the order of certain superconvergent collocation methods.

Zeit: Dienstag, den 4. August 2009 um 16¹⁵ Uhr

Ort: Technikerstr. 13b, Hörsaaltrakt Baufakultät, HSB 1

Mechthild Thalhammer

Gäste sind herzlich willkommen!