

Gastvortrag

Am Montag, den 13. Januar 2020 um 15:00 Uhr hält

Herr Prof. Dr. Martin Ziegler

von der KAIST-Universität, Daejeon, Südkorea, einen Vortrag zum
Thema:

"Computer Science for Numerics".

Since introduction of the IEEE 754 floating point standard in 1985, numerical methods have become ubiquitous --- and increasingly sophisticated. With growing code complexity of numerical libraries grows the need for rigorous Software Engineering methodology: as provided by Computer Science and state of the art regarding digital processing of discrete data, but lacking in the continuous realm.

We apply, adapt, and extend the classical concepts - specification, algorithmics, analysis, complexity, verification - from discrete bit strings, integers, graphs etc. to real numbers, converging sequences, smooth/integrable functions, bounded operators, and compact subsets. A new paradigm bridges between the BSS model and Computable Analysis. It formalizes mathematical structures as continuous Abstract Data Types with rigorous computable semantics.

Der Vortrag findet statt im Raum **3.023**, SBC3 (Gebäude E).

Interessenten sind herzlich eingeladen.

Hamburg, 08.01.2020