



Einladung

zur öffentlichen Antrittsvorlesung

von Herrn Professor Dr. Benjamin Stamm

Herr Prof. Dr. Benjamin Stamm hält am **Montag, 10. Juli 2023, um 16:00 Uhr**,
im Hörsaal V 53.01, Pfaffenwaldring 53, Stuttgart-Vaihingen

seine öffentliche Antrittsvorlesung zum Thema:

„An interdisciplinary journey of computational mathematics“

Abstract:

Numerical simulations are widely used as a third pillar besides experimental and theoretical investigations in many sciences such as physics and chemistry as well as engineering science. It requires the development of robust and efficient numerical methods for the resolution of the underlying physical laws that arise often in form of partial differential equations (PDEs). In this talk, I will describe three different interdisciplinary stories. While illustrating the key-ideas of the theory and methods, I will also highlight the occasions where not only the mathematical tools have been successfully developed and transferred to the application but also where the interdisciplinary interactions raised new mathematical questions and triggered new answers and theories in mathematics. From the application viewpoint, this talk will touch upon implicit solvation models, Born-Oppenheimer molecular dynamics and quantum spin systems but relies on various and diverse mathematical concepts from reduced order modelling to Grassmann manifolds to descriptors from machine learning and perturbation theory.

Hierzu laden wir sehr herzlich ein.

gez. Prof. Dr. Ingo Steinwart (Dekan)