Invitation to the plenary assembly 2023 of the GAMM Junior Research Group at TU Dortmund University

Place: R165 (hybrid)
Zoom Link: Link
Meeting ID: 962 7431 8975
Passcode: 575801

Date: Thursday, 18th April 2024
Time: 4:00 pm (16:00)

Preliminary agenda

TOP 1: General information of the GAMM Junior Research Group

- Nomination of the new chairmen board
- Recap of the past year

TOP 2: Seminar talk by Dr. David Wiedemann (see abstract below)

TOP 3: Discussion and Questions

TOP 4: Open Exchange and Get Together including drinks and food

Abstract

On the notion of polyconvexity for isotropic functions

Dr. David Wiedemann - TU Dortmund University, Chair I: Analysis

We show that the concept of polyconvexity can be effectively simplified for isotropic functions onto the set of diagonal matrices. This results in a substantial decrease in dimensionality, facilitating numerical relaxation for minimization problems in three-dimensional contexts such as elasticity and damage models.

Speaker Bio

Since 2023:	PostDoc, Technical University of Dortmund
05.-06.2023	Secondment to Rockfield (Swansea), Aberystwyth Unviersity, UK
05.-06.2023:	Secondment to Rockfield (Swansea), Aberystwyth Unviersity, UK
01.-04.2023:	Research stay at Isaac Newton Institute, University of Cambridge, UK
09.2022:	Research stay at Simon Fraser University, Vancouver, Canada
2019-2023:	Research assistant, University of Augsburg
2017-2019:	M. Sc. in Mathematics (TopMath), Technical University of Munich
2014-2017:	B. Sc. in Mathematics, University of Augsburg

Scholarships and Awards

- SIAM Student Travel Award (06/2023)

- Award for the best PhD student presentation at the conference on *Mathematics and Mechanics of Solids and Structures*, Aberystwyth, UK (06/2023)

- Recipent of a doctoral scholarship from Studienstiftung des deutschen Volkes (German Academic scholarship Foundation) (10.2020 - 09.2023)

- Funding of a part time position from Marianne-Plehn-Programm of Elitenetzwerk Bayern (Elite Network of Bavaria) (12.2020 - 03.2023)

- Hurwitz Prize for the best Masters graduates at the Technical University of Munich (12.2019)

- TopMath Study Award (for excellent study result), Technical University of Munich (11.2017)