

General assembly of the GAMM Junior Research Group at TU Dortmund University

Place: Ringhotel Drees
Date: 19th of November, 2025
Time: 5pm

Agenda

- TOP 1:* Report of the past year
- TOP 2:* Election of the board for 2025
- TOP 3:* Activities of the Junior Research Group in 2026
- TOP 4:* Dinner and bowling

Executive Board 2025

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|-----------------------|-----------------------------|--|
| President | Marius Harnisch | marius.harnisch@tu-dortmund.de |
| Vice President | Nataly Alejandra Manque Roa | nataly.manque@tu-dortmund.de |
| Secretary | Klas Feike | klas.feike@tu-dortmund.de |
| Treasurer | Jonas Dünnebacke | jonas.duennebacke@tu-dortmund.de |



GESELLSCHAFT für
ANGEWANDTE MATHEMATIK und MECHANIK e.V.
INTERNATIONAL ASSOCIATION of APPLIED MATHEMATICS and MECHANICS

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1 Report of the past year

The activities of the GAMM Junior Research Group at TU Dortmund University this year commenced with our now traditional summer party, where Dr. Sonja Hellebrand (University of Duisburg-Essen) gave an inspiring talk entitled "On the three-dimensional numerical analysis of residual stresses on two scales in hot bulk forming parts." The informal atmosphere afterwards provided an excellent opportunity for professional and personal exchange as well as networking within the group.

This was followed by the fourth edition of our "Doctoral Consultation Hour." Over coffee and cake, students were able to discuss individual questions regarding their doctoral studies – by now an established element of our annual program. We were then delighted to welcome Dr. Andreas Warkentin (University of Kassel), who accepted our invitation and delivered an insightful lecture on "Efficient energy harvesting with ferroelectrics: from material modeling to process optimization." Further highlights included talks by Prof. Magnus Ekh (Chalmers University of Technology) on "Gradient-enhanced phase-field crystal plasticity modeling of ductile failure in polycrystals" and by Prof. Mathias Rögers (TU Dortmund University) on "Variational models for biomembranes". Each of these events was accompanied by lively scientific discussions and social interactions. The same held true for this year's general assembly of the Junior Research Group, during which the current board was confirmed for another term thus continuing to represent the group's interdisciplinary character between mathematics and mechanics. In addition to the scientific program, several friendly football tournaments were organized and met with great enthusiasm.

The activities of the Junior Research Group at TU Dortmund have once again reached a high level this year, supported by numerous dedicated members. This positive dynamic now extends beyond TU Dortmund: within the framework of the Ruhr Alliance, we have already established connections with the Junior Research Group at Ruhr University Bochum. With the joint summer event held together with the University of Duisburg-Essen in May 2025, we successfully continued our networking initiative, creating an excellent platform for scientific exchange and social interaction across university boundaries.

We thank all members for their outstanding commitment and look forward to another year of close collaboration and stimulating contributions.

- 19.11.2025: **General Assembly** at Ringhotel Drees
- 28.10.2025: **Talk** by Assoc. Prof. Knut Andreas Meyer on "Scientific ML for more accurate or faster material modeling"
- 11.08.2025: **Summer Party** of the GAMM Junior Research Group with hike and joint barbecue at Kemnader See, in cooperation with the groups at Bochum and Duisburg-Essen
- 01.05.2025: **Social Event:** Soccer
- 24.04.2025: **Talk** by Prof. Mathias Röger on "Variational models for biomembranes"
- 24.04.2025 **General Assembly** of the GAMM Junior Research Group for 2024
- 21.01.2025: **Talk** by Prof. Magnus Ekh on "Gradient-enhanced phase-field crystal plasticity modeling of ductile failure in polycrystals"
- 12.12.2024: **Christmas Party** and **Talk** by Dr.-Ing. Andreas Warkentin on "Efficient energy harvesting with ferroelectrics: from material modeling to process optimization"
- 24.10.2024: Fourth **Doctoral Consultation Hour** of the GAMM Junior Research Group
- 23.08.2024: **Summer Party** of the GAMM Junior Research Group and **Talk** by Dr.-Ing. Sonja Hellebrand on "On the three-dimensional numerical analysis of residual stresses on two scales in hot bulk forming parts"

2 Election of the board for 2026

Two weeks prior to this general assembly, all regular members were given the opportunity to nominate themselves or others for the election as a member of the board for 2026. For each position, only one nominee was proposed:

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The election can be conducted either by email to the secretary (klas.feike@tu-dortmund.de) until November 19, 2025, or by a physical vote by show of hands at the general assembly. An informal email accepting the nominees is sufficient.

3 Activities in 2026

In the past year, our activities have continued to grow, accompanied by increasingly close ties within the Junior Research Group and with our partner universities in Bochum and Duisburg-Essen. We aim to organize additional joint events in 2026 to further strengthen the exchange across universities and foster sustainable scientific and social connections within the Ruhr Alliance.

Moreover, in 2026, the Junior Research Group at TU Dortmund University will present itself at the GAMM Annual Meeting. Our group is characterized by an exceptional level of commitment and participation from its members. This presentation will therefore provide an excellent opportunity to highlight our lively and successful activities.

We again invite all members to contribute their ideas for upcoming scientific and social events. Whether suggestions for speakers, formats for workshops, or proposals for new collaborations – every contribution is highly appreciated. We look forward to another dynamic year full of inspiring discussions, joint initiatives, and continued growth of our network.