IRTG 1627 - PhD workshop in Dresden (Sept. 3 - 6, 2018)

The second and last student workshop of the 3rd IRTG cohort was held from 3rd to 6th of September 2018 in Dresden, Germany. The objective of these student workshops is to train PhD students **how to plan**, **organize**, **and conduct scientific workshops**.

This four day workshop was organized by IRTG students of Leibniz University Hannover, in collaboration with different institutes of TU Dresden, with generous support from DFG (Deutsche Forschungsgemeinschaft), and with additional support from Institute of Continuum Mechanics, Leibniz University Hannover, and Institute of Mechanics and Shell structures, TU Dresden.

The workshop was divided broadly into four sections, scientific lectures and discussion, student seminar, general training, and team building event.





Scientific lectures covered different topics in the field of computational mechanics, including inf-sup condition checking for finite element problems (by Prof. Oliver Sander from Institute of Numerical Mathematics, TU Dresden), stochastic finite element method (by Dr. Amelie Fau from Institute of Mechanics and Computational Mechanics, Leibniz University Hannover), simulation of elastomers (by Prof. Michael Kaliske form Institute of Structural Analysis, TU Dresden), and phase field methods (by Prof. Markus Kästner, Chair of Computational and Experimental Solid Mechanics, TU Dresden).

In **student seminar section**, different methods of numerical treatment of ill-conditioned problems were introduced, discussed and practiced through implementation of sample problems.

General training section included visiting the facilities of Institute of Light-weight Materials and Polymer Technology of TU Dresden for manufacturing and testing of fiber composite parts and structures, as well as visiting some of their final products. In the second part of the general training, participants were trained **how to conduct debating on a subject**, through learning the structure of debating, group practice and role playing.

The last part of the workshop was a **team building event**, in which the PhD students practiced a different type of team working and endurance through 2.5 hours canoeing in "Elbe" river, as well as enjoying the natural scenery and landscape of the city of Dresden.





The workshop was closed by debriefing and feedback session. All participants reported positive feedback regarding the organization and content of the workshop.

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