

Numerical Techniques in MHD Simulations: Pre-Conference Workshop



August 14-15, 2017

Mathematical Institute, University of Cologne
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The participants of the workshop will get a crash course on the development of a modern MHD solver. Computers (Windows & Linux; MATHLAB) will be provided, it is possible to use your own laptop.

Team

Alexander Astanin, Marvin Bohm, Dominik Derigs, Lucas Friedrich, Gregor Gassner, Johannes Markert, Gero Schnücke, Niklas Wintermeyer, Andrew Winters

Workshop program

Monday, August 14		
9:00-12:30	Introduction to ideal MHD and Finite Volume Methods. Presentation of the project goals. <i>(10:30-11:00: Coffee break)</i>	Cohn-Vossen Lecture Hall (Mathematical Institute, 3 rd floor)
12:30-14:00	<i>Lunch break (we will provide lunch tickets)</i>	Mensa
14:00-18:00	Guided hands on session/implementation of a 2D FV solver for ideal MHD (Simpler version for people with less experience. Advanced version for people with experience.) <i>(15:30-16:15: Coffee break)</i>	PC-Pools 1 & 2 (Mathematical Institute, souterrain, rooms -117 & -118)

Tuesday, August 15		
9:00-12:30	Guided hands on session/implementation of a 2D FV solver for ideal MHD (Simpler version for people with less experience. Advanced version for people with experience.) <i>(10:30-11:00: Coffee break)</i>	PC-Pools 1 & 2 (Mathematical Institute, souterrain, rooms -117 & -118)
12:30-14:00	<i>Lunch break (we will provide lunch tickets)</i>	Mensa
14:00-18:00	Discussion of projects, presentation of results, outlook to modern simulation codes. <i>(15:30-16:15: Coffee break)</i>	PC-Pools 1 & 2 (Mathematical Institute, souterrain, rooms -117 & -118)