



Current positions

Group leader Magneto-hydrodynamics and head of the magneto-hydrodynamics laboratory MEKKA at Institute for Nuclear and Energy Technologies (IKET) (since 2017)

Previous positions

Scientist at FZK/KIT (since 1989)

On leave to Northwestern University, Evanston/Chicago (1995-1996)

Scientific degrees

Dr.-Ing. (PhD) in University of Karlsruhe (1992)

Habilitation, University of Karlsruhe (2008)

apl. Professor at KIT (2012)

Recent research topics

Fluid mechanics, liquid metal blankets, liquid metal technology, magnetohydrodynamics, magneto-convection

Publications (5 most important)

- **L. Bühler, H.-J. Brinkmann, C. Koehly.** Experimental study of liquid metal magnetohydrodynamic flows near gaps between flow channel inserts. *Fusion Eng. Des.* (2019) [doi:10.1016/j.fusengdes.2018.11.034](https://doi.org/10.1016/j.fusengdes.2018.11.034)
- **L. Bühler et al.**, Development of combined temperature - electric potential sensors, *Fusion Eng Des* 136, 7-11 (2019), [doi:10.1016/j.fusengdes.2017.12.004](https://doi.org/10.1016/j.fusengdes.2017.12.004)
- **L. Bühler, C. Mistrangelo, H.-J. Brinkmann, and C. Koehly.** Pressure distribution in MHD flows in an experimental test-section for a HCLL blanket. *Fusion Eng. Des.*, 127, 168-172 (2018) [doi:10.1016/j.fusengdes.2018.01.007](https://doi.org/10.1016/j.fusengdes.2018.01.007)
- **L. Bühler, C. Mistrangelo,** Determination of multichannel MHD velocity profiles from wall-potential measurements and numerical simulations, *Fusion Eng. Des.*, 130, 137-141 (2018) [doi:10.1016/j.fusengdes.2018.03.041](https://doi.org/10.1016/j.fusengdes.2018.03.041)
- **C. Mistrangelo, L. Bühler, H.-J. Brinkmann,** Experimental investigation of MHD pressure losses in a mock-up of a liquid metal blanket, *Nuclear Fusion*, 58, 036012 (2018) [doi:10.1088/1741-4326/aaa133](https://doi.org/10.1088/1741-4326/aaa133)