

MM 9: Invited Talk: Markus Stricker

Time: Monday 15:00–15:30

Location: C 130

Invited Talk

MM 9.1 Mon 15:00 C 130

Materials Informatics - appreciation of data and algorithms

— ●MARKUS STRICKER — Ruhr-Universität Bochum

The foundation of the scientific method is reliable data. Digitalization in all parts of our society provides more and more accessible data. The amount and quality of available data, however, need new approaches to use the contained knowledge to its full potential. Within Materials

Science these new methods are developed and applied in the sub-field of Materials Informatics. I will provide an overview of the current state of Materials Informatics and discuss applications of how data and algorithms are used to improve the description, characterization, discovery, and optimization of materials. Concrete examples include data fusion from experiments and simulations, active learning for materials discovery, and how latent knowledge in scientific texts can be efficiently used by employing natural language processing.