MATHEMATISCHES KOLLOQUIUM

UNIVERSITÄT DUISBURG ESSEN

Offen im Denken

Sir John Ball

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Many alloys undergo phase transformations involving a change of shape of the underlying crystal lattice at a critical temperature. In order for such a phase transformation to take place, the product phase needs to be able to form a microstructure that is geometrically compatible with the parent phase. Lack of compatibility induces hysteresis, while special properties of the transformation strain allow increased geometric possibilities and thus lower hysteresis. The lecture will describe how the mathematical study of compatibility has led to the recent discovery of new kinds of interfaces between phases and spectacular new ultra-low hysteresis materials.

Ort: Universität Duisburg-Essen, Fakultät für Mathematik, Thea-Leymann-Str. 9, 45127 Essen, Raum WSC-S-U-4.02

Zeit: Mittwoch, 7. Dezember 2016 um 17:15 Uhr

Vor dem Vortrag gibt es ab 16:45 Uhr Gelegenheit zum Gespräch bei Kaffee und Tee in Raum WSC-S-4.05.

Die Dozenten der Mathematik