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DK Seminar

December 16, 2015, 14:15 - 15:45
Vienna University of Technology,
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Micromagnetics and magnetostrictive materials

Magnetostriction (or magnetoelasticity) is the capability of certain ferromagnetic materials to convert magnetic energy to mechanical energy and vice versa. This bidirectional coupling between the magnetic and mechanical states provides a transduction capability that is of great applicative interest in connection with the design of actuators and sensors. In this talk, we discuss the mathematical model of magnetostriction and provide an effective strategy for the numerical discretization.