

*Axiomata
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Leges Motus*



Seminar über Fragen der Mechanik

zu folgendem Vortrag wird herzlich eingeladen

Dienstag, **19.01.2010, 14:00 Uhr**, Egerlandstr. 5, Raum 0.044

A variational formulation for a magneto sensitive body interacting with a rigid semi-infinite body, and some restricti- ons for the total energy function

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This talk will be devoted to two different topics:

- On the first part we present some results concerning a variational formulation for a magneto-sensitive body, which is interacting with a rigid semi-infinite body. These two bodies are surrounded by free vacuum space. In a first approximation we assume they are perfectly attached, and the rigid semi-infinite body is magnetizable.
- On the second part of this talk, we discuss about a simple method we can use to find some restrictions on the total energy function, which has been used to model the behaviour of magneto-sensitive elastomers. These constitutive restrictions are inequalities based on the well know Baker-Ericksen inequality for isotropic materials.