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A direct theory of affine bodies. (English) Zbl 1210.74011

Int. J. Eng. Sci. 38, No. 8, 865-878 (2000).

Summary: A direct derivation of the theory of affine bodies is presented, with emphasis posed to the constitutive principles underlying the theory and to the role of the group of invariance of the theory (the congruences of physical space). To reconcile our abstract presentation with the standard one, an identification procedure of the constitutive relations of an affine body from that of a three-dimensional Cauchy body is also presented.

MSC:

74A20 Theory of constitutive functions in solid mechanics

Cited in 1 Document

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