Title: Unisymmetry, a new framework for non-uniform materials.

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Abstract: To any material body we can associate a groupoid, the so-called material groupoid, which encodes the constitutive properties of the material; indeed, it is related with the material symmetry groups. Whenever this groupoid is Lie, we say that the material is uniform. We consider here the case of functionally graded materials, which is the paradigm of non-uniform material. For this type of media we will define some kind of uniformity and characterize their homogeneity in terms of some integrability properties of associated Lie groupoids. The theory is illustrated with some examples of elastic solids and fluids.