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ELASTIC CUSPED BEAM, PLATE, AND SHELL HIERARCHICAL MODELS AND THEIR RELATION TO THE 3D CLASSICAL LINEAR MODELS

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The present paper gives an up-dated exploratory survey of investigations concerning elastic cusped beams (i. e., the areas of their cross-sections maybe equal to zero at their ends) [1, 2], cusped plates and shells (i. e., their thicknesses may vanish either on some parts of their projection boundaries or on the whole ones) [3–6]. The relation of such 2D classical and hierarchical mathematical models to physical models (i. e., objects under study) and to the 3D classical linear model is also studied. Along with the analysis of well-known results it contains some new and unpublished results as well.

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