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Hydroelastic waves on elastic cells and fluid sheets¹ EMILIAN PA-RAU, MARK BLYTH, UEA — The deformations of an elastic cell in an uniform stream are examined numerically. Multiple solutions corresponding to steady wave modes are found. Comparisons are made with the case of a bubble with constant surface tension in an uniform stream. Related problems will be discussed, e.g. the deformation of an elastic cell in a circulatory flow and the travelling waves on fluid sheets between two elastic plates.

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