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The deformation of an elastic ring by surface forces¹ TOM MULLIN, University of Manchester — We present the results of experimental investigations into instabilities in an elastic ring floating on a fluid. An initially circular ring sits on the surface of a fluid filled cone and is compressed as the liquid is drained away. The compressive forces give rise to buckling instabilities in the ring and these can be related to results for the compression of solid rings within cylinders. The effects of outer boundary shapes have been explored where anisotropic forcing has produced interesting cases.

¹EPSRC 'Senior Felowship'

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