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Contour dynamics with boundaries DARREN CROWDY, Imperial College London, AMIT SURANA, MIT — Contour dynamics is a well-known numerical method for computing the motion of planar patches of uniform vorticity. Usually, the patches are taken to exist in free space. There is much interest however (e.g. for geophysical applications), in formulating a generalized contour dynamics algorithm for computing vortex patch motion in general fluid domains bounded by impenetrable walls. This talk will present some new theoretical ideas for the construction of such an algorithm.

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