

Abstract Submitted
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Von Kármán vortex streets: analytical solutions with distributed vorticity DARREN CROWDY, CHRISTOPHER GREEN, Imperial College London — We present analytical solutions for both staggered and unstaggered von Kármán vortex streets. Instead of point vortices, we employ a distributed vorticity model consisting of arrays of hollow vortices whose shapes are determined as part of the solution scheme (it is a free boundary problem). The new solutions are compared with purely numerical solutions based on the vortex patch model computed by Saffman & Schatzman in 1981.

Darren Crowdy
Imperial College London

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