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Christian Zillinger*, USC Dornsife Department of Mathematics, 3620 S. Vermont Ave, Los Angeles, CA 90007, and **Michele Coti Zelati**. *On degenerate circular and shear flows: the point vortex and power law circular flows.*

We consider the problem of asymptotic stability and linear inviscid damping for perturbations of a point vortex and similar degenerate circular flows. Here, key challenges include the lack of strict monotonicity and the necessity of working in weighted Sobolev spaces whose weights degenerate as the radius tends to zero or infinity. (Received September 20, 2017)