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Title: On the desingularization of pairs of point vortices in the presence of background shear.

Abstract: In this talk, I will discuss the existence of periodic pairs of simply connected patches for Euler equations with a background shear flow. In particular, using a Nash-Moser implicit function iterative scheme, we show the existence of a curve of periodic pair of patches when their separation distance belongs to a Cantor set with almost full Lebesgue measure. This is a joint work with Taoufik Hmidi and Nader Masmoudi.