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Large time behavior in perfect incompressible flows

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The question of characterizing the large time behavior of a bidimensional perfect incompressible flow is still largely open. The few known results give some information on the vorticity rather than the velocity itself . This eight hours mini-course is intended to present the latest developments on the subject. We shall start by reviewing the main global existence results. Next, we prove the best known bounds for the confinement of the vorticity. We finally end with another point of view for large time behavior: we will try to describe the week limits of different rescalings of the vorticity.