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Xiaoqian Xu* (xxu@math.wisc.edu). *Fast growth of the vorticity gradient in symmetric smooth domains for 2D incompressible ideal flow.*

We will construct an initial data for the two-dimensional Euler equation in a bounded smooth symmetric domain, such that the gradient of vorticity in L^∞ grows as a double exponential in time for all time. Our construction is based on the recent result by Kiselev and Šverák. (Received February 10, 2015)