

## **T Singularity Formation in Fluid Models**

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I will discuss a few recent well-posedness results for incompressible fluid equations in critical regularity spaces and how they give rise to interesting lower dimensional equations through looking at special solutions belonging to those spaces. We will then discuss how these new lower-dimensional equations relate to more classical models of the 3d Euler equation such as De Gregorio's model. Finally, we will discuss finite-time singularity formation in De Gregorio's model