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**Peter Constantin\*** ([const@math.princeton.edu](mailto:const@math.princeton.edu)), Department of Mathematics, Princeton University, Princeton, NJ 08544. *The Lagrangian-Eulerian method.*

We present results based on the Lagrangian-Eulerian method of constructing solutions to hydrodynamic PDE. The method uses Lagrangian deformations and analysis in Eulerian variables. The outcome is Lipschitz dependence in path space for a number of models, including inviscid Boussinesq, Oldroyd B, incompressible porous medium, SQG and Euler equations. (Received March 20, 2017)