

On the compressible Euler and Navier–Stokes system driven by stochastic forcing

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Abstract

We discuss the Euler and Navier-Stokes system describing the motion of a compressible fluid driven by the time white-noise type of external force. We show some basic mathematical properties of solutions including stability and weak-strong uniqueness in the stochastic setting. We also present results on the existence of stationary solutions and ill/posedness for the Euler system by means of the method of convex integration.