Remarks on the Navier-Stokes equations in homogeneous and isotropic spacetimes

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The Navier-Stokes equations are considered in homogeneous and isotropic spacetimes. The energy estimates of the equations are constructed. The effects of the spatial expansion and contraction are characterized by the dissipative and anti-dissipative properties of the equations. The Cauchy problem for the Navier-Stokes equations is considered under the constant density.