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Michele Coti Zelati* (micotize@indiana.edu). *On the stability of the weak attractor of the 3D Navier-Stokes equations.*

We consider the three-dimensional Navier-Stokes-Voigt (NSV) equations and we analyze, from the asymptotic behavior view point, its Navier-Stokes (NS) limit as the relaxation parameter vanishes. We show that the NSV-attractors converge to the weak NS-attractor in the Hausdorff semidistance induced by the weak L^2 -metric on the absorbing set of the Navier-Stokes equations. Some results related to the strong topology of L^2 are also proved. (Received January 27, 2014)