

Large time behavior of global solutions to the rotating Navier-Stokes equations

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We consider the large time behavior of global solutions for the initial value problem of the Navier-Stokes equations with the Coriolis force in the three-dimensional whole space. We establish the L^p temporal decay estimates with the dispersion effect of the Coriolis force for global solutions. Moreover, we show the large time asymptotics of global solutions behaving like the first-order spatial derivatives of the integral kernel of the corresponding linear solution. This talk is based on the joint work with Takanari Egashira (Kyushu University).