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**Gregory A Varner\*** (gvarner@jbu.edu), 2000 West University Street, Siloam Springs, AR 72761. *Existence and Uniqueness of Time-Invariant Measure for the Time-Dependent Navier-Stokes Equations.*

We will discuss recent results on the existence and uniqueness of time-invariant measure for the time-dependent two-dimensional Navier-Stokes equations on the sphere under a random kick-force. In particular, the necessary conditions for the existence and uniqueness of the measure for the kick-force model are presented for the time-periodic equations. Furthermore, a complete description of the support of the invariant measure is given in general and in several special cases. Extending the result to the general time-independent equations will also be discussed. (Received September 10, 2014)