

1083-60-89

**Meng Xu\*** (mxu@rockefeller.edu), 500 E. 63rd St., New York, NY 10065, and **Sivaguru Sritharan.** *Malliavin Calculus for Stochastic Point Vortex and Lagrangian Models.*

We explore the properties of solutions of two stochastic fluid models for viscous flow in two dimensions. We establish the absolute continuity of the law of the corresponding solution using Malliavin calculus. (Received August 21, 2012)