962-60-742 **Ming Liao*** (liaomin@mail.auburn.edu), Department of Mathematics, Auburn University, Auburn, AL 36849. *Decomposition of stochastic flows.*

The stochastic flow generated by a stochastic differential equation on a compact Riemannian manifold may be decomposed as a random transformation with a stationary point followed by a random isometric transformation. Moreover, the first transformation preserves the directions in which the tangent vectors at the stationary point are dilated at fixed Lyapunov rates. Such a decomposition is unique. (Received September 24, 2000)