

**Feng-Yu Wang**

Tianjin University

**Entropy Estimate Between Diffusion Processes with  
Application to MV SDEs**

Abstract

By developing a new technique called the bi-coupling argument, we estimate the relative entropy between different diffusion processes in terms of the distances of initial distributions and drift-diffusion coefficients. As an application, the entropy-cost inequality is established for McKean-Vlasov SDEs.