

1155-60-597

Tai Melcher*, 141 Cabell Drive, Kerchof Hall, Charlottesville, VA 22904. *Smoothness of measures associated to Brownian motions.*

Smoothness is a fundamental principle in the study of measures on infinite-dimensional spaces. Smoothness properties on such measure spaces has allowed, for example, the development of a calculus which has become an invaluable tool in the analysis of stochastic processes and their applications. Canonical examples of smooth measures include those induced by a Brownian motion, both its end point distribution and as a real-valued path. We'll consider measures induced by Brownian motions in different infinite-dimensional geometric settings, and discuss the standard types of results of interest, including some motivation for their study. (Received January 21, 2020)