Mathematics > Probability

A Central Limit Theorem for a sequence of Brownian motions in the unit sphere in Rn

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We use a Stochastic Differential Equation satisfied by Brownian motion taking values in the unit sphere $S_{n-1}subsetmathbb{R}^{n}$ and we obtain a Central Limit Theorem for a sequence of such Brownian motions. We also generalize the results to the case of the n-dimensional Ornstein-Uhlenbeck processes.

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