

# THE ASYMPTOTIC BEHAVIOR OF A CLASS OF STOCHASTIC PDES

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We consider a class of stochastic partial differential equations which is used to characterize two commonly studied population models called super-Brownian motion and Fleming-Viot Process. After establishing the tightness property of these processes, we discuss the derivation of four limit theorems in modern probability theory: large and moderate deviations, Strassen's compact Law of the Iterated Logarithm and exit problem. The results presented here are from joint work with P. Sundar and Jie Xiong.