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Umesh Singh* (usingh_52@yahoo.co.in), CIMS, Dept of Statistics, Banaras Hindu University, Varanasi, 221005, India. *The Random Fixed Point Theory and Applications*.

In this survey talk we present the theory of random fixed points and its application to the study of Ky Fan's best approximation. Random fixed point theory is a stochastic generalization of classical fixed point theory and has applications in probability theory and nonlinear analysis. The random fixed point theory for self-maps and non self-maps has been developed within a few decades by several researchers. We give extensions of a few known results for non self- maps and present a few applications. (Received August 15, 2008)