Small Value Probabilities and Branching Processes Prof. Dr. Wenbo V. Li (University of Delaware)

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We first provide an overview on fundamental roles of small value probability (estimates of rare events that positive random variables take smaller values than typical ones) in the theory of stochastic processes. Then we focus on estimates associated with variants of Branching processes and their martingale limits. Relevant techniques and tools will be discussed in the simplest setting.