Quasi-Stationary Distributions and Their Applications

Hanjun ZHANG *Xiangtan University, China*, E-mail: hjz001@xtu.edu.cn

Abstract: Let us begin with the talk by recalling the key three questions of quasi-stationary distributions (QSDs); and then we shall talk about many new progresses on above the key three questions of QSDs; and also talk about some open problems on QSDs. Finally we shall discuss the applications of QSDs.

References

[1] E.A. van Doorn (2012). Conditions for the existence of quasi-stationary distributions for birth-death processes with killing, *Stochastic Process. Appl.*, **122**, 2400–2410.

[2] E.A. van Doorn (1991). Quasi-stationary distributions and convergence to quasi-stationarity of birth-death processes, *Adv. Appl. Prob.*, **23**, 683-700.