ERGODICITY PROPERTIES OF 2-PARAMETER MARKOV COLLISION PROCESSES WITH RESURRECTION

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Abstract: This paper concentrates on investigating ergodicity properties of 2-parameter Markov collision processes with resurrection. Easy checking criteria including several clear-cut corollaries are established for ordinary and strong ergodicity of such processes. The equilibrium distribution is given in an elegant closed form for the ergodic case. As a preparation, the criteria for regularity and uniqueness for such structure are also established.

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