PARAMETER ESTIMATION FOR THE SIMPLE SELF-CORRECTING POINT PROCESS

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Abstract. We consider the simple self-correcting point process whose intensity takes only the two levels, a and b, where the level a $(0 < a < 1)$ is the state of the intensity for low stress, and the level b $(1 < b < \infty)$ is for high stress. Then, the maximum likelihood estimators of a and b and their asymptotic distributions are explicitly shown. These results may be instructive and suggestive for studying more general cases of self-correcting point processes.