

EXPLICIT REPRESENTATION OF THE SKOROKHOD MAP WITH TIME  
DEPENDENT BOUNDARIES

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*Abstract:* An explicit formula for the Skorokhod type reflection map for real-valued càdlàg functions is developed in the general case of constraining set  $[\alpha, \beta]$ , where  $\alpha$  and  $\beta$  are not constant but change with time. In addition, a number of properties of the reflection map, including continuity and Lipschitz conditions under uniform,  $J_1$  and  $M_1$  metrics, are studied.

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