

# Financial Mathematics

Boundary equations for the American put in models with  
jumps

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In the Black-Scholes model the early exercise premium representation for the price of an American put option gives rise to an integral equation, which is known to characterize the optimal exercise boundary. We prove that the same is true in jump-diffusion models with only negative jumps, and also discuss the case of positive jumps where we do not get such an equation for the boundary.