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Sergei Levendorskii* (levendorskii@gmail.com). *Ghost Calibration and Pricing Barrier*

Options and CDSs in Spectrally One-Sided Lévy Models: the Parabolic Laplace Inversion Method.

Recently, the advantages of conformal deformations of the contours of integration in pricing formulas were demonstrated in the context of wide classes of Lévy models and the Heston model. In the present paper we construct efficient conformal deformations of the contours of integration in the pricing formulas for barrier options and CDS in the setting of spectrally one-sided Lévy models. We demonstrate that the proposed method is more accurate than the standard realization of Laplace inversion in many cases. We also exhibit examples in which the standard realization is so unstable that it cannot be used for any choice of the error control parameters. This may lead to a ghost calibration: a situation where a parameter set of a model is declared to be a “good fit” to the data only because the errors of calibration and of the numerical method used for pricing (almost) cancel each other out. (Received September 05, 2014)