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#### **Mathematical Physics**

# The path integral representation kernel of evolution operator in **Merton-Garman model**

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(Submitted on 25 Jun 2011)

In the framework of path integral the evolution operator kernel for the Merton-Garman Hamiltonian is constructed. Based on this kernel option formula is obtained, which generalizes the well-known Black-Scholes result. Possible approximation numerical schemes for path integral calculations are proposed.

Comments: 16 pages

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