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Anna L Mazzucato* (alm24@psu.edu), McAllister Building, University Park, PA 16802, and
Radu Costantinescu, Nick Costanzino and **Victor Nistor**. *Approximate solutions to
parabolic equations*. Preliminary report.

We discuss an elementary approach to short-time asymptotic expansions of solutions to second-order, linear parabolic equations. We allow for certain type of degenerate coefficients such as those arising in stochastic volatility models. We obtain error bounds in weighted spaces by means of pseudodifferential symbol calculus. (Received August 24, 2009)