

1064-35-191

Anna L Mazzucato* (alm24@psu.edu), Department of Mathematics, Penn State University, University Park, PA 16802, and **Victor Nistor** and **Wen Cheng**. *Explicit parametrices for time-dependent Fokker-Planck equations.*

We construct explicit approximate Green's functions of certain time-dependent Fokker-Planck equations in terms of Dyson series, Taylor expansions, and exact commutator formulas. The algorithm gives an approximate solution that is accurate to arbitrary order in time in the short-time limit. (Received September 08, 2010)