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**Jungmin Choi\*** ([choi@math.fsu.edu](mailto:choi@math.fsu.edu)), 208 Love Building, Academic Way, Tallahassee, FL 32306, and **Max Gunzburger**. *Approximation and Application of the Musiela Stochastic PDE in Forward Rate Models.*

We consider Musiela equation of the forward rates, which is a hyperbolic stochastic differential equation. A weak formulation of the problem using the SUPG (Streamline Upwind Petrov Galerkin) method is analyzed. Error analysis of the method yields estimates for the convergence rates. Computational examples are provided that illustrate not only the discretization methods used, but the type of results relevant to bond pricing that can be obtained from the equation. (Received January 25, 2010)