

1083-60-78

**Barbara Rüdiger\*** (ruediger@uni-wuppertal.de), Mathematics Department, , FB C,  
Bergische Universität Wuppertal, 52119 Wuppertal, Germany. *Structural stability of SPDEs with Lévy noise and applications to finance.*

In [1] we proved the structural stability of SPDEs with Lévy noise, when perturbing the (Lipschitz) drift- and noise coefficients or when differentiating w.r.t initial data. This can in particular be applied [3] to analyze the structural stability of the HJM- forward interest rate model with Lévy noise analyzed in [2] as well as its derivatives [3].

## References

- [1] Albeverio, S., Mandrekar, V., Rüdiger, B. (2009): Existence of mild solutions for stochastic differential equations and semilinear equations with non Gaussian Lévy noise. *Stochastic Processes and Their Applications* **119**(3), 835–863.
- [2] Filipović, D., Tappe, S. (2008): Existence of Lévy term structure models. *Finance and Stochastics* **12**(1), 83–115.
- [3] Rüdiger, B., Tappe, S., Stability results for perturbations of Lévy term structure models, submitted

(Received August 18, 2012)