

# Erratum to “Convex ordering for random vectors using predictable representation”

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In Theorem 4.1 of [1], the processes  $(\hat{A}(t))_{t \in \mathbb{R}_+}$  and  $(t, x) \mapsto \hat{B}_t(x)$  should be deterministic functions (and not  $\mathcal{F}_t^M$ -predictable processes) in order for the convex concentration inequality (4.2) to hold. The same applies to  $(\hat{A}(t))_{t \in \mathbb{R}_+}$  and  $(\hat{J}(t))_{t \in \mathbb{R}_+}$  in Corollaries 4.2 and 4.3.

Processes that are  $\mathcal{F}_t^M$ -predictable (instead of being deterministic functions) can be considered in (4.2) under additional conditions based on the Malliavin calculus, cf. [2] in the one-dimensional case with jumps.

## References

- [1] M. Arnaudon, J.-C. Breton, and N. Privault. Convex ordering for random vectors using predictable representation. *Potential Anal.*, 29(4):327–349, 2008.
- [2] J.-C. Breton, B. Laquerrière, and N. Privault. Convex comparison inequalities for non-Markovian stochastic integrals. Preprint, to appear in *Stochastics*, 2012.

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