MEAN-VARIANCE HEDGING IN INCOMPLETE MARKETS AND APPLICATIONS. THE CASE OF PROCESSES WITH INDEPENDENT INCREMENTS.

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For a large class of vanilla contingent claims, we establish explicit Föllmer-Schweizer decomposition when the underlying is a process with independent increments (PII) and an exponential of a PII process. This allows to provide an efficient algorithm for solving the mean variance hedging problem. Applications to models derived from the electricity market are performed.

This talk is based on a joint paper with Stéphane Goutte and Nadia Oudjane.