

DEPENDENT MARKED POINT PROCESSES

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(joint work with Gabriel Lang)

In the recent years, the crisis seemed to prove that small jumps are not always sufficient for financial modelling. Moreover, order books or the repartition of forests have been recently modelled through Hawkes or more generally Cox processes. In this work we develop concepts of weak dependence adapted to such models; asymptotic theoretical results are also considered in our setting. This work fits the frame of our previous weak dependence concepts (see Dedecker, Doukhan, Lang, Leon, Louhichi and Prieur's 2007 monograph). A first use of this work is to derive alternatives to the Ripley goodness of fit test provided in http://arxiv.org/PS_cache/arxiv/pdf/1006/1006.1567v1.pdf, yielding thus the power of such tests.