## Recent advances on market making regulation

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## Abstract

In this talk, we present recent tools enabling regulators and exchanges to set relevant operating rules for financial markets, notably at the microstructure level. We first introduce the issue of optimal make-take fees, which consists in finding suitable contracts between market makers and exchanges to ensure the attractiveness of markets. Mathematically speaking, we formulate this question in term of a principal-agent problem that we solve in an original way. Then we present a new methodology allowing us for a ranking of market makers according to the quality of the liquidity they provide. In this approach, we use a very general modelling of limit order books via non-linear and state dependent Hawkes-like processes for which new ergordic properties are proved. This talk is based on joint works with Omar El Euch, Thibaut Mastrolia, Othmane Mounjid, Pamela Saliba and Nizar Touzi.

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