

Papers to review

Optimal execution

- 1) A. Obizhaeva and J. Wang. Optimal trading strategy and supply/demand dynamics
- 2) Guéant, Olivier. Optimal execution and block trade pricing: a general framework
- 3) Peter Kratz, Torsten Schöneborn, Portfolio liquidation in dark pools in continuous time
- 4) C. Frei and N. Westray. Optimal execution of a VWAP order: A stochastic control approach
- 5) Pierre Cardaliaguet, Charles-Albert Lehalle, Mean Field Game of Controls and An Application To Trade Crowding
- 6) Cont, R. and Kukanov, A. Optimal order placement in limit order markets
- 7) Alfonsi, Aurélien, Antje Fruth, and Alexander Schied. "Optimal execution strategies in limit order books with general shape functions
- 8) Hey, N., Mastromatteo, I., Muhle-Karbe, J., & Webster, K. Trading with Concave Price Impact and Impact Decay-Theory and Evidence.

Make-Take Fees

- 9) Foucault, Thierry and Kadan, Ohad and Kandel, Eugene, Liquidity Cycles and Make/Take Fees in Electronic Markets
- 10) Bastien Baldacci, Dylan Possamaï, Mathieu Rosenbaum, Optimal make take fees in a multi-market maker environment

Market impact

- 11) Hey, N., Bouchaud, J. P., Mastromatteo, I., Muhle-Karbe, J., & Webster, K. The cost of misspecifying price impact.
- 12) Moro et al., Market impact and trading profile of hidden orders in stock markets
- 13) B. Toth, I. Palit, F. Lillo, and J. D. Farmer, Why is equity order flow so persistent?
- 14) Robert Almgren, Chee Thum, Emmanuel Hauptmann, and Hong Li, "Direct estimation of equity market impact"
- 15) Cont, Rama and Wagalath, Lakshithe, Risk Management for Whales

High-frequency price modelling

- 16) Bacry, Muzy, Hawkes Model for price and trades high-frequency dynamics
- 17) Weibing Huang, Charles-Albert Lehalle, Mathieu Rosenbaum, Simulating and analyzing order book data: The queue-reactive model

Market making and trading strategies

- 18) Guilbaud, Fabien and Pham, Huyên, Optimal high-frequency trading with limit and market orders
- 19) A. Cartea, S. Jaimungal, and J. Ricci. Buy low, sell high: A high frequency trading perspective
- 20) Cartea, Donnelly, Jaimungal, Algorithmic Trading with Model Uncertainty
- 21) Alexander Barzykin, Philippe Bergault, Olivier Guéant. Dealing with multi-currency inventory risk in foreign exchange cash markets

Optimal execution and options

22) T. Li and R. Almgren. Option hedging with smooth market impact

23) Álvaro Cartea, Luhui Gan, Sebastian Jaimungal, Hedge and Speculate: Replicating Option Payoffs with Limit and Market Orders

Automated Market makers

24) Philippe Bergault, Louis Bertucci, David Bouba, Olivier Guéant, Automated Market Makers: Mean-Variance Analysis of LPs Payoffs and Design of Pricing Functions

25) Álvaro Cartea, Fayçal Drissi and Marcello Monga, Decentralised Finance and Automated Market Making: Predictable Loss and Optimal Liquidity Provision

26) Milionis, J., Moallemi, C. C., Roughgarden, T., & Zhang, A. L. Automated market making and loss-versus-rebalancing

27) Echenim, M., Gobet, E., & Maurice, A. C. (2023). Thorough mathematical modelling and analysis of Uniswap v3.

Misc

28) Nutz, M., Webster, K., & Zhao, L. (2023). Unwinding stochastic order flow: When to warehouse trades

29) Bruno Biais, Thierry Foucault et Sophie Moinas, Equilibrium Fast Trading

30) Sophie Moinas et al., Click first or last? Strategic order submission during the Euronext preopening session