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Application of stochastic control methods for trading on power markets

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This work deals with the application of stochastic control methods for trading on power markets. It acquaints readers with the basics of the functioning of the electronic exchange and with the specifics of the energy market. This is followed by the theory of stochastic differential equations and stochastic optimal control. The objective is to understand the current results in the field of optimal trading on the energy exchange, which includes the implementation of a suitable numerical scheme to solve the Hamilton–Jacobi–Bellman equation, and come up with a modification of the solution that would include current real business aspects and constraints in the energy market.

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