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## **The valuation of American options in multidimensional exponential Lévy model**

We consider the problem of valuation of American options written on dividend-paying assets whose price dynamics follows multidimensional exponential Lévy model. We examine carefully the relation between the option prices, related partial integro-differential variational inequalities and reflected backward stochastic differential equations. In particular, we prove regularity results for the value function and obtain the early exercise premium formula for broad class of payoff functions.

My talk will be based on joint work with Tomasz Klimsiak [1].

### **References**

- [1] T. Klimsiak and A. Rozkosz, The valuation of American options in multidimensional exponential Lévy model. arXiv:1602.08887.