

Model independent bounds for the option prices

Options are financial instruments whose payoff depends on the evolution of some underlying financial asset. A main theme in mathematical finance is to determine the rational price of a given option. Classically, one first postulates a model for the asset. The price of the option is then calculated as a (risk-neutral) expectation of the options payoff.

A problem one is facing here is that, in general, the price obtained in this way depends on the choice of the underlying model. Considering different models, one obtains a whole interval of possible prices. The aim of model-independent finance is to determine this interval, i.e. to understand the model-risk associated to option pricing.

In this talk we give a general introduction to the model-independent approach and discuss two particular examples.