LATTICE OPTION PRICING BY MULTI-DIMENSIONAL INTERPOLATION

Abstract

I will talk about a method for pricing high-dimensional American options that is based on modern methods of multidimensional interpolation. The method allows the use of sparse grids and thus mitigates the curse of dimensionality. I will discuss a framework for the pricing algorithm and the corresponding interpolation methods. I will also talk about an application of this pricing method to rainbow options and compare it to the Least-Squares Monte Carlo method and other benchmarks.