NATASHA KIRBY, University of Western Ontario Using Real Options to Value an Ethanol Plant

In this talk we discuss a real options approach to valuing a corn ethanol plant. Operators of these plants have optionality in making certain operating decisions based on the price of corn (input) and gasoline (output). A variety of valuation techniques are used in this study, including a retrospective analysis, bootstrapping and partial differential equations. We will focus on the PDE approach to solving the optimal control problem and draw conclusions from the numerical solution.