1046-60-907

A Deniz Sezer* (adsezer@ucalgary.ca), Department of Mathematics and Statistics, University of Calgary, Calgary, Alberta T2N1N4, Canada. An information reduction model for credit risk based on level crossings of a diffusion.

I will talk about a reduced information model for credit risk. In this model, the time when a company claims bankruptcy is the hitting time of the asset value process of the company, denoted by X_t , to a default threshold. The market can not observe X_t prior to bankruptcy, however it can observe $R(X_t)$, where R(x) = i, if $x_i < x < x_{i+1}$, where $x_1, ..., x_N$ are certain thresholds. I will explain how we derive zero coupon bond prices and default intensities when the X process is a diffusion. In the time remaining I will discuss open questions and future directions related to this model. (Based on joint work with Robert Jarrow and Philip Protter). (Received September 12, 2008)