Stochastic Analysis Seminar
Date: May 5, 2008
Speaker: Delia Coculescu (ETH Zurich)
Title: Default risk estimation under imperfect information.

Abstract:
We shall present an evaluation method for financial assets subject to default risk, where investors cannot observe the state variable triggering the default, but do observe a correlated price process. The enlargement of filtrations with a random time appears as a natural tool for modeling the market information. In our setting we prove that the default time is totally inaccessible in the market's filtration and derive the conditional default probabilities and the intensity process. Finally, we provide pricing formulas for default-sensitive claims and illustrate on particular examples the shapes of the credit spreads.

Based on work with Helyette Geman and Monique Jeanblanc.