1037-60-267   **Chadam John*** (`chadam@pitt.edu`), Mathematics Department, Thackeray Hall, 512, University of Pittsburgh, Pittsburgh, PA 15260. *Credit Default Correlation.*

We shall investigate the modeling of default correlations in the context of various competing approaches – structural (value-of-firm) models, copula models and reduced (intensity) models. The starting point of the work is the rigorous solution of the inverse first crossing problem relating the default probability of a single firm with its default boundary. This result is used to derive the joint probability of default for two firms in this value-of-firm setting. The resulting expression is compared to the approximations obtained from the copula and the intensity model approaches. In particular we compare tail dependence, default clustering and pricing of first-to-default (FtD) swaps. The presentation will be self-contained and accessible to graduate students. (Received February 04, 2008)