Meeting: 1002, Pittsburgh, Pennsylvania, SS 11A, Special Session on Mathematical Finance

1002-60-101 Ian Iscoe (iscoe@algorithmics.com), 185 Spadina Ave., Toronto, Ontario M5T 2C6, Canada, and Alexander Kreinin* (alex@algorithmics.com), 185 Spadina Ave., Toronto, Ontario M5T 2C6, Canada. Valuation of Basket Default Swaps.

We consider the analytical valuation of Basket Default Swaps. Our solution is based on a continuous-time model in the conditional independence framework. We use the order statistics of the default times of the names in the basket to derive an analytical expression for the value of the swap. We find a recursive algorithm for computation of conditional and unconditional risk-neutral default probabilities of the default process of the basket. (Received September 07, 2004)