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

1002-60-225 **Victor W. Goodman*** (goodmanv@indiana.edu), Mathematics Department, Indiana University, Bloomington, IN 47405. *Interest Rate Explosions in HJM Bond Models.* Preliminary report.

The risk-neutral structure of an HJM model is determined by the volatility of forward interest rates. There are well-known volatility choices that produce models with interest rate explosions. We show that if prices are described with a bond numeraire instead of a cash numeraire, a martingale measure appears which is singular with respect to the risk-neutral measure. We conjecture that this measure describes a survival mode of well known models, where a long bond price has not dropped to zero. (Received September 14, 2004)