

**Meeting:** 1006, Lubbock, Texas, SS 9A, Special Session on Theory and Application of Stochastic Differential Equations

1006-91-59            **Y. Liu\***, Department of Mathematical Sciences, New Mexico State University, Las Cruces, NM 88003-8001, and **M. C. Mariani**, Department of Mathematical Sciences, New Mexico State University, Las Cruces, NM 88003-8001. *A new analysis of the effects of the Asian Crisis of 1997 on Emergent markets.*

This work is devoted to the study of the financial Asian crisis of 1997, and its consequences on emerging markets. We have done so by means of a phase transition model. We have analyzed the crashes on leading indices of Hong Kong (HSI), Turkey (XU100), Mexico (MMX), Brazil (Bovespa) and Argentina (Merval). We were able to obtain optimum values for the critical date, corresponding to the most probable date of the crash. The improvement in the estimation of the critical date is due to a previous analysis of the parameters involved. The estimation of the critical date was excellent except for the Argentina's index. We only used data from before the true crash date in order to obtain the predicted critical date. The good numerical results validate the model. (Received February 01, 2005)