## 1035-60-1650

Jin Ma and Meike Niederhausen\* (niederha@up.edu), University of Portland, Department of Mathematics, 5000 N. Willamette Blvd., Portland, OR 97203. Backward Stochastic Differential Equations with Jumps and Quadratic Growth.

In this talk we will discuss the existence and uniqueness of BSDEs with quadratic growth and jumps. This problem is a generalization of Kobylanski which considers BSDEs with the quadratic growth assumption, but continuous paths. An exponential change of variable is used to control the quadratic growth, which is a counterpart of the Hopf-Cole transformation used in PDEs. However, due to the presence of the jumps and the lack of information on the extra martingale integrand, the analysis is more complex than in the continuous case. (Received September 20, 2007)