1014-76-347   **John Harlim*** (`jharlim@math.umd.edu`), 1301 Mathematics Building, College Park, MD 20742, and **Brian Hunt**. *An Efficient Ensemble Kalman Filter for Numerical Weather Prediction.*

The Ensemble Kalman Filter is introduced as a data assimilation scheme. This least-square based method corrects initial conditions for numerical weather forecasting by accounting the current forecast and observation uncertainties. In this talk, I will discuss an efficient method of implementing Ensemble Kalman Filter and present some results, obtained from applying this filter to a simple "weather-like" model. (Received September 12, 2005)