1108-60-145   **Mark M Meerschaert*** (`mcubed@stt.msu.edu`), Department of Statistics and Probability, Michigan State University, East Lansing, MI 48824. *Random field models for hydraulic conductivity in ground water flow.*

A standard model in ground water hydrology uses random fields to interpolate sparse data on hydraulic conductivity. The resulting random field is used to parameterize a partial differential equation model for flow and transport, which is then solved by numerical methods. This talk will review the state of the art in such models, and discuss open problems. (Received January 08, 2015)