Geophysical Research Abstracts, Vol. 10, EGU2008-A-10957, 2008 SRef-ID: 1607-7962/gra/EGU2008-A-10957 EGU General Assembly 2008 © Author(s) 2008



## Inverse conditional stochastic modeling

## J. J. Gómez-Hernández

Dep. of Hydraulic Engineering, Universidad Politécnica de Valencia, Spain (jgomez@upv.es / Fax: +34 963 877 618)

From single realizations conditioned by trial-and-error to ensemble Kalman Filtering, from likelihood models to non-parametric representations, from geostatistics to Bayesian statistics, from pilot points to Monte Carlo Markov chains, from self-calibration to gradual deformation, from simple models to complex ones. In the last decades many approaches have been taken to address the problem of inverse modeling in groundwater, some of which have evolved within a stochastic framework to yield a multiple realization analysis with direct conditioning on the aquifer parameter data and inverse conditioning on the aquifer state information.