

Innovative techniques for inverse analysis

Organizer:

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Abstract:

Performing accurate and predictive numerical simulations requires models which have been carefully calibrated and validated with respect to experimental observations. The goal of this mini-symposium is to present, in both deterministic and stochastic (Bayesian) contexts, recent fundamental advances in inverse methods in regards to innovative and powerful numerical approaches which emerged recently. We anticipate contributions on the following topics:

- data assimilation and real-time model updating;
- use of model reduction or multiscale approaches;
- adaptive strategies;
- analysis of full-field measurements;
- representation and propagation of model and measurement errors;
- goal-oriented model updating;
- experimental design.

List of possible speakers:

B. Marchand
F. Legoll
G. Puel
M. Bonnet
F. Pled
S. Chaillat
R. Cottureau
P. Gosselet
F. Chinesta
E. Nadal
B. Rosic
J. Waeytens
O. Zahm
A. Manzoni
P. Diez
E. Florentin
P. Feissel
F. Hild
Y. Maday
T. Wildey