Program EnKF Workshop 2011

Monday 20/06/2011:

11:30-12:00:	Check in
12:00-13:00:	Lunch
13:00-13:15:	Welcome, Randi Valestrand (IRIS)
13:15-13:45:	**Hans Wackernagel** (Ecole des Mines de Paris) and Laurent Bertino (NERSC): "Localisation of the Kalman filter update without spoiling the covariance structure (a geostatistical perspective)"
13:45-14:15:	**Ibrahim Hoteit**, Xiaodong Luo and Thomas Amler (King Abdullah University of Sciences and Technology, KAUST, Thuwal, KSA): "Robust Ensemble Kalman Filtering For Data Assimilation into Large Scale Models with Intermittent and Fast Varying Regimes"
14:15-14:45:	**Svetlana Dubinkina,** Hugues Goosse and Yoann Sallaz-Damaz Lemaître (Center for Earth and Climate Research, Earth and Life Institute, Universitè Catholique de Louvain, Louvain-la-Neuve, Belgium): "A data assimilation approach to reconstruct climate changes over the past centuries "
14:45-15:00:	Break
15:00-15:45:	**Geir Evensen** (Statoil); "An Ensemble Smoother for Assisted History Matching**"**
15:45-16:15:	**Anahita Abadpour**, Richard Rivenq (Geosciences Research Centre, Total E&P UK): "History Matching and Production Forecast Uncertainty Using Ensemble Kalman Filter: a Real Field Case Study"
16:15-16:45:	**Yan Chen** (IRIS) and Dean Oliver (CIPR): "Iterative ensemble smoother for reservoir history matching"
16:45-17:00:	Break
17:00-17:45:	**Harrie-Jan Hendriks Franssen** (Institute of Bio- and Geosciences (IBG): "Ensemble Kalman Filter in subsurface hydrology: operational implementation and non-Gaussianity."
17:45-18:15:	**Jon Sætrom** (Statoil Research Centre): "Error Quantification in the Ensemble Kalman Filter"
19:30:	Dinner

Tuesday 21/06/2011:

08:30-09:15:	**Al Reynolds** (University of Tulsa); **"**Towards a More Robust Adaptation of the Ensemble Kalman Filter for Data Assimilation and Uncertainty Quantification in Reservoir Management Applications**"**
09:15-09:45:	**Andrey Kovalenko** (CIPR): "Approximate distribution of the EnKF sampling error"
09:45-10:00:	Break
10:00-10:45:	**Elana Fertig** (Johns Hopkins University)
10:45-11:15:	**Olwijn Leeuwenburgh,** Elisabeth Peters and Frank Wilschut, (TNO): "Using the EnKF for Structural Reservoir Model Updating by Assimilation of Time-Lapse Seismic Data
11.15-11.45:	**Svetlana Losa**, Jens Schröter, Sergey Danilov, Lars Nerger, Tijana Janji• (Alfred Wegener Institute for Polar and Marine Research (AWI)) and Frank Janssen (German Maritime and Hydrographic Agency (BSH)): "Implementing SEIK filter for NOAA SST data assimilation into BSH operational circulation model for the North and Baltic Seas: Inference about the model and data.
11:45-12:45:	Lunch
13:15-22:30:	**Cultural arrangement**

Wednesday 22/06/2011:

08:15-09:00:	**Milija Zupanski** (Colorado State University); "A control theory approach to nonlinearity and non-differentiability in ensemble data assimilation**"**
09:00-09:30:	**M. Glegola,** P. Ditmar, TU Delft, R.G. Hanea (TNO/TU Delft), F. Vossepoel, (Shell Int. Expl. and Prod. BV), R. Arts (TNO), O. Eiken (Statoil): "History matching of a gas field model with gravity and production data using an ensemble smoother: a numerical study"
09:30-10:00:	**Alin Chitu**, Elisabeth Peters, Frank Wilschut, and Remus Hanea**:** "A kernel based EnKF history matching for a 3D, 3 phase, realistic case"
10:00-10:15:	Break
10:15-10:45:	Leonid Grigoriev, Alexander Ermolaev, **Nikolay Kazakov** (Gubkin Univ. Moscow): "Localisation of ensemble mean at analyze step in EnKF algorithm"
10:45-11:15:	**Andreas S. Stordal** (IRIS), Hans A.Karlsen (UiB), Geir Nævdal (IRIS), Dean S.Oliver (CIPR), Hans J. Skaug (UiB): "Multimodal posterior distributions: a local Kalman Gain approach"
11:15-11:45:	**Pavel Sakov** (NERSC, Mohn-Sverdrup Center and CSIRO): "Iterative EnKF for strongly nonlinear systems"
11:45-12:45:	Lunch
12:45-13:30:	**Peter Jan van Leeuwen** (University of Reading); **"**Particle filters in high-dimensional geophysical systems**"**
13:30-14:00:	**Oliver Pajonk**, Bojana Rosic, Alexander Litvinenko, Hermann G. Matthies (TU Braunschweig): "An Abstract View on Random Variable Representation and its Consequences"
14:00-14:30:	**Inge Myrseth,** (The Norwegian Computing Center) and Jon Sætrom (Statoil): "Cross Validation and Bootstrapping for improved Kalman Gain estimates."
14:30-14:45:	Break
14:45-15:15:	**Pallav Sarma, (**Chevron), Jincong He and Louis Durlofsky (Stanford University): "Use of Reduced-order Models for Improved Data Assimilation within an EnKF Context"
15:15-15:45:	**Remus Hanea**, Christian Maris, and Ali Vakili (TNO): "Different distance based reparameterization for a history matching application with the EnKF"
15.45-16.15:	**Laurent Bertino** (1), Pavel Sakov (1,2), and Francois Counillon(1) (1) NERSC, Mohn-Sverdrup Center, Bergen, Norway, (2) CSIRO, Hobart, Australia: "The TOPAZ ocean and sea ice pilot reanalysis (2003 -2008)"
16.15:	Concluding remarks

Speaker's name written in **Boldface**

Posters:

1. Hajoon Song, **Ibrahim Hoteit**, Bruce Cornuelle and Aneesh Subramanian (King Abdullah University of Sciences and Technology, KAUST, Thuwal, KSA): "An Adjoint-Based Adaptive Ensemble Kalman Filter"
2. **Rolf Johan Lorentzen**, Geir Nævdal and Ali Shafieirad (IRIS): "Estimating facies fields using the ensemble Kalman filter and distance functions – applied to shallow-marine environments"
3. **Yan Chen** (IRIS) and Dean Oliver (CIPR): "Multiscale Parameterization and Localization for Improved data assimilation in EnKF"
4. Garfield Bowen, **Thomas Dombrowsky** (Schlumberger): "Principal Component Analysis and the Ensemble Kalman Filter – A Comparison"
5. **Yuanyuan Shuai**, Christopher D. White,Ting Sun, Shannon Chalet and Juan M. Lorenzo (Louisiana State University): "Ensemble Kalman Filter with adaptive updating, and application to a meter-scale physical model"
6. **Bogdan Sebacher**, Remus Hanea and Arnold Heemink (TNO): "EnKF for estimating "the probability" of occurrence of the facies at a certain location"
7. **Tijana Janjic Pfander** (Alfred Wegener Institute for Polar and Marine Research). " Domain localization in ensemble based Kalman filter algorithms"
8. **Lars Nerger** (Alfred Wegener Institute for Polar and Marine Research (AWI)): "A regulated localization method for ensemble-based Kalman filters"