List of posters

The list is ordered on the family name of the first mentioned author of the poster.

- *Corrective Data Assimilation Scheme using a Suboptimal Kalman Filter and Subspace Identification,*
  Oscar Barrero (UCL.KUL).
  Abstract: In this research subspace identification is proposed as a corrective approach to the Kalman filter estimation in a large scale data assimilation framework. These estimation errors can be caused by unknown boundary conditions, unknown initial conditions, unknown input disturbances, missing/erroneous physics etc. Therefore, modelling the residuals between the Kalman filter estimation and the real system with subspace identification, it is possible to improve the output estimation.

- *State Estimation in a Class of Stochastic Hybrid Systems,*
  Eugenio Cinquemani (UPD), Mario Micheli (UPD).

- *Dynamic factors models and rank constrained LMI's,*
  Wolfgang Scherrer (TUW.IO).
  Abstract: In this 'poster' dynamic factor models, where the noise term is a white noise process are considered. The problem whether a process (with a rational spectral density) may be written as such a dynamic factor model, is equivalent to the existence of a solution to a set of LMI's with rank constraints. This is in general a hard (NP) problem. However one might use local strategies based on convex relaxations and branch- and bound methods for concave programming for solving this problem.

- *Acoustic Feedback Cancellation in a Closed-Loop System Identification Framework,*
  Toon Van Waterschoot (UCL.KUL) and Marc Moonen (UCL.KUL),
  Abstract: In a Public Address (P.A.) system the loudspeaker sound is often fed back into the microphone. This may result in system instability which is perceived as 'howling'. Acoustic Feedback Cancellation (AFC) aims at identifying the unknown room impulse response, so that the feedback signal can be estimated and cancelled. This comes down to Closed-Loop System Identification, which often leads to biased estimates. A recently proposed, unbiased AFC technique for hearing aids applies Filtered-X adaptive filtering. We relate this technique to standard Prediction Error and Instrumental Variable identification methods.

- *On Multivariable Frequency Response Identification in the Presence of Periodic Disturbances*
  Erik Wernholt (ULIN), Sven Hanssen (ABB), Stig Moberg (ABB), Svante Gunnarsson (ULIN).

Jan H. van Schuppen
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