

Poster Session I — Signal Processing and System Identification

When: June 3, 2014 13:00–14:00

Where: Colosseum

Chair: Tianshi Chen

1. **Decision-making And Control For Automated Highway Driving**
Urban Forssell, Öhlins Racing AB
Martin Lugnberg, Öhlins Racing AB
Per Svennerbrandt, Öhlins Racing AB
David Bolander, Öhlins Racing AB
2. **Misfire Detection And Quantitative Detection Performance Analysis**
Daniel Eriksson, Department of Electrical Engineering, Linköping University
Erik Frisk, Department of Electrical Engineering, Linköping University
Mattias Krysanter, Department of Electrical Engineering, Linköping University
Lars Eriksson, Department of Electrical Engineering, Linköping University
3. **Imu-based Vehicle Load Estimation Under Normal Driving Conditions**
Maryam Sadeghi Reineh, Division of Automatic Control, Linköping University
Martin Enqvist, Division of Automatic Control, Linköping University
Fredrik Gustafsson, Division of Automatic Control, Linköping University
4. **A Closed-loop Instrumental Variable Approach To Mass And Center Of Mass Estimation Using Imu Data**
Jonas Linder, Automatic Control, Department of Electrical Engineering, Linköping University
Martin Enqvist, Automatic Control, Department of Electrical Engineering, Linköping University
5. **Estimating Approximate Inverse Models Of Block-oriented Systems**
Ylva Jung, Linköpings universitet
Martin Enqvist, Linköpings universitet
6. **Estimating Models Of Inverse Systems**
Ylva Jung, Linköpings universitet
Martin Enqvist, Linköpings universitet
7. **Variance Results For Parallel Cascade Serial Systems**
Niklas Everitt, KTH
Cristian R. Rojas, KTH
Håkan Hjalmarsson, KTH
8. **A Simulated Annealing Approach To Exact Experiment Design For Dynamical Systems**
Patricio Valenzuela, KTH Royal Institute of Technology
Cristian Rojas, KTH Royal Institute of Technology
Håkan Hjalmarsson, KTH Royal Institute of Technology
9. **Particle Filter-based Gaussian Process Optimisation For Parameter Inference**
Johan Dahlin, Linköping University
Fredrik Lindsten, University of Cambridge

10. **Sequential Monte Carlo Methods For Graphical Models**
Christian Andersson Naesseth, Linköping University
Fredrik Lindsten, Linköping University
Thomas Schön, Uppsala University
11. **Calculation Of Relative Gain Array Based On Nonparametric Process Identification- A Frequency Domain Approach**
Ali Kadhim, Luleå University of Technology
Wolfgang Birk, Luleå University of Technology
Thomas Gustafsson, Luleå University of Technology
12. **Step Response Method For Second-order Non-minimum Phase Model Identification**
Winston Garcia-Gabin, ABB AB Corporate Research
13. **Using Smartphones To Teach Sensor Fusion And Kalman Filtering**
Gustaf Hendeby, Linköping University
Fredrik Gustafsson, Linköping University
Niklas Wahlström, Linköping University
14. **Variable Probability Of Detection For Gm-phd Filtering**
Gustaf Hendeby, Linköping University
Rickard Karlsson, Linköping University
15. **Observation Model For Monte Carlo Localization**
Anas Alhashimi, LTU
George Nikolakopoulos, LTU
Thomas Gustafsson, LTU
16. **Doppler-only Localization In Acoustic Sensor Networks**
David Lindgren, LiU, FOI
Fredrik Gustafsson, LiU
Hans Habberstad, FOI
Gustaf Hendeby, LiU, FOI
17. **Robust Nls Sensor Network Calibration Using Mds Initialization**
Viktor Deleskog, FOI
Hans Habberstad, FOI
Gustaf Hendeby, FOI
David Lindgren, FOI
Niklas Wahlström, LiU
18. **Evidence Extended Em Algorithm For The Calibration Of Ground Sensor Networks**
Marek Syldatk, Division of Automatic Control, Linköping University
Fredrik Gustafsson, Division of Automatic Control, Linköping University
19. **3d Synthetic Aperture Imaging Using A Water-jet Coupled Large-aperture Single Transducer**
Miguel Castaño Arranz, Luleå University of Technology
Johan Carlson, Luleå University of Technology
Matti Rantatalo, Luleå University of Technology
Robert Risberg, Creo Dynamics AB
Miles Weston, TWI Technology Centre Wales
20. **Multiple Extended Object Estimation: Practical Results Using Video And Laser**
Karl Granström, Automatic Control, Linköping University

21. Acoustic Control Of Surveillance Camera*David Enberg, LiU**Emma Ring, LiU**Martin Nilsson, LiU**Maria Andersson, FOI***22. Pyparticleest: A Software Framework For Particle Based Estimation Methods***Jerker Nordh, Lund University***23. A Comparison Of Moment Computation Schemes: Monte Carlo, Ut, Integration Rules, Taylor***Michael Roth, Linköping University**Fredrik Gustafsson, Linköping University***24. Observer Design For A Class Of Nonlinear Systems Subject To Unknown Inputs***Saleh Sayyaddelshad, Lulea University of Technology**Thomas Gustafsson, Lulea University of Technology***25. Probabilistic Convergence Of Kalman Filtering Over Nonstationary Fading Channels***Junfeng Wu, Royal Institute of Technology**Guodong Shi, Royal Institute of Technology (KTH)**Karl Henrik Johansson, Royal Institute of Technology (KTH)***26. Clutch Modeling, Observability Analysis, And Extended Kalman Filter Design***Andreas Myklebust, Linköping University*