

Workshop on diagnosis and prognostics

November 19, 2009

Visionen, Building B, Entrance 27,
Campus Valla, Linköpings universitet



Linköping University
INSTITUTE OF TECHNOLOGY

Program

- 9.30 - 9.40 Introduction
- 9.40 - 10.25 *Off-board diagnosis at Scania*, Tony Lindgren, Scania
- 10.25 - 10.45 Coffee break
- 10.45 - 11.30 *Diagnostics in Gripen NG - New aircraft, new possibilities*,
Torbjörn Fransson, Saab Aerosystems
- 11.30 - 12.45 Lunch, Kårallen
- 12.45 - 13.30 *On-board diagnosis at GM*, Per Andersson, GM Powertrain
- 13.30 - 14.15 *Design for diagnosis - Towards a model-based safety assesment process*, Peter Bonus, Uptime
- 14.15 - 15.15 Poster session and research mingle, coffe break
- 15.15 - 15.45 Summary and outlook

Diagnosis posters

1. *Leakage detection in a fuel evaporative system* - Mattias Krysander and Erik Frisk
2. *An efficient algorithm for finding minimal over-constrained sub-systems for model-based diagnosis* - Mattias Krysander, Jan Åslund, Mattias Nyberg
3. *Diagnosability analysis* - Erik Frisk and Mattias Krysander
4. *Sensor placement for fault diagnosis* - Mattias Krysander and Erik Frisk
5. *Sensor placement for fault isolation in linear differential-algebraic systems* - Erik Frisk, Mattias Krysander and Jan Åslund
6. *FlexDx: A reconfigurable diagnosis framework* - Mattias Krysander, Fredrik Heintz, Jacob Roll, Erik Frisk
7. *Statistical properties and design criterions for AI-based fault isolation* - Mattias Nyberg, Mattias Krysander
8. *Probability based diagnosis* - Anna Pernestål
9. *Automated Assistance Systems for Efficient Off-board Diagnosis* - Håkan Warnquist
10. *Modellbaserad residualgenerering för dieselmotorer* - Carl Svärd

Posters

1. *Emission and pumping work reduction in diesel engines* - Johan Wahlström, Lars Eriksson
2. *Control of a driveline with a slipping clutch* - Andreas Myklebust, Lars Eriksson
3. *Look-ahead control* - Erik Hellström, Jan Åslund, Lars Nielsen
4. *Virtual sensors for gas flows in heavy duty engines* - Erik Höckerdal
5. *Modeling and control of advanced turbocharged engines* - Lars Eriksson, Oskar Leufvén, Andreas Thomasson, Lars Nielsen, Per Andersson.