Technical reports from the Department of Information Technology

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[2018-008] Owe Axelsson, Maya Neytcheva and Anders Ström. An Efficient Preconditioning Method for State Box-Constrained Optimal Control Problems. March 2018. This is a major revision of Technical Report 2017-004. In the new version all the numerical experiments have been rerun with new much more efficient dynamic stopping criteria.


[2015-033] Volkan Cambazoglu, Ramūnas Gutkovas, Johannes Åman Pohjola and Björn Victor. *Modelling and Analysing a WSN Secure Aggregation Protocol: A Comparison of Languages and Tool Support*. November 2015. Updated 2015-12-02: The results in subsection 4.1.3 are updated because we realised that Pwb can evaluate the SHIA model faster for network sizes of 2 and 4, and also can handle network size of 8.


[2013-026] Sofia Cassel, Falk Howar, Bengt Jonsson, Maik Merten and Bernhard Steffen. *A Succinct Canonical Register Automaton Model*. December 2013. This is an extended version of a paper published in ATVA 2011. The extended version has been accepted for publication in JLAP.


[2012-033] Per Pettersson, Gianluca Iaccarino and Jan Nordström. *A Stochastic Galerkin Method for the Euler Equations with Roe Variable Transformation*. November 2012. This is a complete rewrite of report nr 2012-021 with new results. A more general framework for the representation of uncertainty is used. All figures have been replaced and more numerical results have been added (methods of manufactured solutions, convergence in space and the stochastic dimension for subsonic and supersonic flow).


[2010-026] Xin He, Maya Neytcheva and Stefano Serra Capizzano. On an Augmented Lagrangian-Based Preconditioning of Oseen Type Problems. November 2010.


[2010-021] Michael Thuné and Anna Eckerdal. Students’ Conceptions of Computer Programming. September 2010. The phenomenographic outcome space presented in this report has previously been published as part of a journal article (Thuné and Eckerdal 2009). Due to space limitations in the journal publication, we have found it appropriate to make available a more comprehensive description of the outcome space, in the present technical report.


[2009-015] Håkan Selg. Två kulturer på Internet: Resultat av faktor- och klu-

and Extending Interface Penalties for Multi-Domain Summation-by-

[2009-013] Jim Wilenius. Combinatorial and Simultaneous Auction: A Prag-
Updated May 28, 2009.

Strategies based on Minimum Variance Control and Linear Quadratic


[2009-010] Lars Ferm, Andreas Hellander and Per Lötstedt. An Adaptive Al-
gorithm for Simulation of Stochastic Reaction-Diffusion Processes.
April 2009.

[2009-009] Sofia Eriksson and Jan Nordström. Analysis of the Order of Accuracy

[2009-008] Henrik Johansson. A Meta-Partitioner for Run-Time Selection and
Evaluation of Multiple Partitioning Algorithms for SAMR Grid Hi-

for Parallel SAMR Applications. March 2009.

A Stable and Conservative High Order Multi-block Method for the


[2009-004] Arnold Pears and Lauri Malmi. The 8th Koli Calling International
Conference on Computing Education Research. February 2009. Up-
dated June 2009.

[2009-003] Erik Nordström, Per Gunningberg and Christian Rohner. A Search-


[2009-001] Arne Andersson and Jim Wilenius. A New Analysis of Revenue in the
Combinatorial and Simultaneous Auction. January 2009. Updated
May 2009.

[2008-026] Björn Holmberg. Stereoscopic Estimation of Surface Movement from


