

# Known master theses using LS-DYNA 2019 and spring 2020

## Sweden

Title	Author	Second author	Year	Institute
Improving comfort simulations of sleeping mattresses for IKEA	Joel Elinder		2020	LTH
Virtual testing of self-piercing rivet connections	Daniel Andersson	Fredrik Saliba	2020	LTU
Polymer Materials in Heavy Goods Vehicle Crash Simulation	Sandra Benzler		2020	LTU
A study of wear and load behaviour on bucket teeth for heavy-duty cable shovels	Jamal Choudhry		2020	LTU
Modeling and Evaluation of a Finite Element Cervical Spinal Cord for Injury Assessment	Nicole Valle Olivera		2020	KTH
Development of a new test methodology for car-to-truck crash	Matas Buzys	Sara Nilsson	2019	KTH
CAE modelling of cast aluminium in automotive structures	Sreehari Veditherakal Shreedhara	Subrat Raman Singh	2019	LiU
Simulating pull-out fracture in particleboard	Tapiwanashe Phiri	Niklas Björkman	2019	LiU
FE Modeling of Cushion 3D Motion for Sheet Metal Forming Simulation	Jagdish Jadhav		2019	BTH
Evaluation of Head and Neck Injuries during Misuses of Child Restraint Systems	Steinunn Kristín Jóhannsdóttir		2019	KTH
Evaluation of Test Methods for Football Helmets Using Finite Element Simulations	Aðalheiður Gunnarsdóttir		2019	KTH
Improvements and Validation of THUMS Upper Extremity	Kristín Sverrisdóttir		2019	KTH
Investigating In-plane Shear Behaviour of Uncured Unidirectional Prepreg Tapes	Ming Kai Chea		2019	KTH
Increasing Simulation Performance: Experimental tests of bottlenecks and scalability of LS-DYNA on Tetra Pak HPC-clusters	Tommie Eriksson	Christoffer Damfelt	2019	HV
Vehicle crash reconstructions using FE human body model to improve injury predictions	PALOMA MUÑIZ FERNÁNDEZ	ILIJA TODOROVIC	2020	Chalmers
Improvement of Human Body Model Rib Fracture Risk Prediction	Amanda Blennow		2020	Chalmers
A Stochastic Approach for Parameter Relevance Estimation in Vehicle Interior Simulations of Frontal Impacts	WILLIAM HÜBINETTE		2019	Chalmers
Sheet Metal Forming Simulations with Elastic Dies: Emphasis on Computational Cost	Allesson, Sara		2019	BTH
Extraction of tool reaction forces using LS-DYNA and its use in Autoform sheet metal forming simulation	Zachén, Esbjörn		2019	BTH
FE based method for simulation of rock-loading on a truck	Zeaiter, Ali	Kohestani, Tamim	2019	BTH
Feasibility of Probabilistic Submarining Prediction in Finite Element Occupant Model Simulations	Renner, Victoria	Sharma, Sumit	2019	CTH
Reconstruction of Fall Injuries for Children of Different Ages	Björgvinsdóttir, Linda		2019	KTH
Topology optimization of a car body component	Ekström Andersson, Albin		2019	LTU
Numerical Methods for Simulating the Metal Shearing Process	Svanberg, Andreas		2019	LTU

## Norway

Buckling of Non-spherical Moss-LNG tank	Sanne, Andreas		2019	NTNU
Fluid Structure Interaction Analysis of Abnormal Wave Slamming Events	Louise Ankerstjerne Rolland		2018	NTNU
Analysis of an Offshore Jacket subjected to Supply Vessel Impacts	Erlend Flatøy		2018	NTNU
Damage Assessment of Sevan 1000 FPSO Subjected to Impacts from Shuttle Tankers	Hagen, Stian Arneborg		2018	NTNU
Analysis and Design of Stiffened Columns in Offshore Floating Platforms Subjected to Supply Vessel Impacts	Terje Skogan Bøe		2018	NTNU
Analysis of accidental iceberg impacts with large passenger vessels and FPSOs	Gowtham Radhakrishnan		2018	NTNU/Aalto

## Denmark

Design of Blast Resistant Armor System Utilizing High Density Polyethylene	Laust Rolf Christensen	Øystein Aune	2019	Aalborg
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## Finland

Nonlinear finite element modelling of a simply supported beam at ambient temperature and under fire	Chaulagain, Amrit		2020	Hämeen
Effect of specimen geometry and friction in the high strain rate compression tests	Pun, Lalit		2019	Tampere