

PAPER PRESENTATIONS & SHORT COMMUNICATIONS



(ADDITIONAL PAPERS TO BE ADDED)

Variations in User Implementation of the CORA Rating Metric

Devon L. Albert, Center for Injury Biomechanics, Department of Biomedical Engineering and Mechanics, Virginia Tech

Analysis of Kinematic Response of Pediatric Occupants Seated in Naturalistic Positions in Simulated Frontal Small Offset Impacts: With and Without Automatic Emergency Braking

J. Maheshwari, S. Sarfare, Center for Injury Research and Prevention, Children's Hospital of Philadelphia; C. Falciani, Center for Injury Research and Prevention, Children's Hospital of Philadelphia /School of Computing and Informatics, Drexel University; A. Belwadi, Center for Injury Research and Prevention, Children's Hospital of Philadelphia

Evaluation of Rotation Reduction Features in Infant and Extended-Use Convertible Child Restraint Systems during Frontal and Rear Impacts

Declan A. Patton, Aditya N. Belwadi, Jalaj Maheshwari, Center for Injury Research and Prevention, Children's Hospital of Philadelphia; Kristy B. Arbogast, Center for Injury Research and Prevention, Children's Hospital of Philadelphia/Perelman School of Medicine, University of Pennsylvania

Kinematic and Injury Response of Reclined PMHS in Frontal Impacts

Rachel Richardson, John-Paul Donlon, Mohan Jayathirtha, Jason L. Forman, Greg Shaw, Bronislaw Gepner, Jason R. Kerrigan, University of Virginia Center for Applied Biomechanics; Martin Östling, Krystoffer Mroz, Bengt Pipkorn, Autoliv Development AB

Geometrical and Mechanical Characterization of the Abdominal Fold of Obese Post Mortem Human Subjects for Use in Human Body Modelling

Matthieu Lebarbé, CEESAR (France); Philippe Beillas, Tomas Janak, Yoann Lafon, Univ Lyon, Univ Claude Bernard Lyon 1, Univ Gustave Eiffel, IFSTTAR, LBMC, UMR_T 9406 (F-69622 Lyon, France); Oliver Richard, Faurecia Automotive Seating (France); Philippe Petit, LAB PSA Peugeot Citroën Renault (Nanterre, France)

Lives Saved by Accelerating the Implementation of Vehicle Safety Technology in New South Wales

Johan Strandroth, Strandroth Inc, Lösningar Pty Ltd; Ralston Fernandes, Greer Banyer, Antonietta Cavallo, Transport for New South Wales, Centre for Road Safety

Occupant-Based Injury Severity Prediction

Susan H. Owen, Jeffrey W. Joyner, Global Product Safety & Systems, General Motors; Peng Zhang, Stewart C. Wang, University of Michigan International Center for Automotive Medicine

Self-reported Non-nominal Sitting in Passengers is Influenced by Age and Height

Adam D. Goodworth and Jeremiah Canada, Westmont College

Analysis of Lap Belt Fit to Human Subjects using CT Images

Yoshihiko Tanaka, Atsushi Nakashima, Haijie Feng, Koji Mizuno, Nagoya University; Minoru Yamada, Yoshitake Yamada, Yoichi Yokoyama, Masahito Jinzaki, Keio University School of Medicine

THOR-05F Response in Sled Tests Inducing Submarining and Comparison with PMHS Response Corridors

Olivier Richard, Faurecia Automotive Seating; Matthieu Lebarbé, Jérôme Uriot, CEESAR; Xavier Trosseille, Philippe Petit, LAB PSA Peugeot-Citroën Renault; Z. Jerry Wang, Humanetics Innovative Solutions; Ellen Lee, NHTSA

Instantaneous Brain Strain Estimation for Automotive Head Impacts via Deep Learning

Shaoju Wu, Wei Zhao, Department of Biomedical Engineering, Worcester Polytechnic Institute, Worcester, MA; Saeed Barbat, The Ford Company; Jesse Ruan, Tianjin University of Science and Technology, China; Songbai Ji, Department of Biomedical Engineering, Worcester Polytechnic Institute

Quantifying the Effect of Pelvis Fracture on Lumbar Spine Compression during High-rate Vertical Loading

David R. Barnes, SURVICE Engineering Co., Belcamp, MD, USA; Narayan Yoganandan, Jason Moore, John Humm, Frank Pintar, The Medical College of Wisconsin, Milwaukee, WI, USA; Kathryn L. Loftis, U.S. Army DEVCOM DAC, Aberdeen Proving Ground, MD, USA

Effects of Technology on Drivers' Behavior during Backing Maneuvers

Yasuhiro Matsui, National Traffic Safety and Environment Laboratory, Japan; Shoko Oikawa, Tokyo Metropolitan University, Japan

Driving Behavior during Right-Turn Maneuvers at Intersections on Left-Hand Traffic Roads

Yasuhiro Matsui and Naruyuki Hosokawa, National Traffic Safety and Environment Laboratory, Japan; Shoko Oikawa, Tokyo Metropolitan University, Japan

Ligaments Laxity and Elongation at Injury in Flexed knees during Lateral Impact Conditions

Sahar Benadi, LAB Stellantis Renault (Nanterre – France)/Univ Lyon, Univ Gustave Eiffel, Univ Claude Bernard Lyon 1, LBMC UMR T_9406, F-69622 Lyon, France; Xavier Trosseille, Philippe Petit, LAB Stellantis Renault (Nanterre – France); Jérôme Uriot, CEESAR (Nanterre – France); Yoann Lafon, Philippe Beillas, Univ Lyon, Univ Gustave Eiffel, Univ Claude Bernard Lyon 1, LBMC UMR T_9406, F-69622 Lyon, France

Investigation of Potential Injury Patterns and Occupant Kinematics in Frontal Impact with PMHS in Reclined Posture

Pascal Baudrit, Jérôme Uriot, CEESAR (Nanterre – France); Olivier Richard, Matthieu Debray, Faurecia Automotive Seating (France)

SC A Quantitative Correlation between Two Partially Defined Surfaces

Joseph LeSueur, Frank A. Pintar, Joint Department of Biomedical Engineering, Marquette University & Medical College of Wisconsin; Carolyn E. Hampton, Michael Kleinberger, DEVCOM Army Research Laboratory, Aberdeen Proving Ground MD

SC Boot Geometry Effects on Force Mitigation after Development of a New Boot Finite Element Model

Carolyn E. Hampton, Michael Tegtmeyer, DEVCOM Army Research Laboratory, Aberdeen Proving Ground