New Physics based pre-processing Tools for LS-DYNA Safety Simulation set-up

BETA CAE Systems S.A.
ANSA Physic based pre-processing

- Solver based seatbelt stretching and fitting
- Dummy articulation with contacts
- Coupling of dummy articulation, kinetic solver, contacts and solver
- Using the build-in MBD solver to extract initial conditions and avoid costly solver pre-runs
Solver based seatbelt stretching and fitting
Dummy articulation with contacts
Coupling of dummy articulation, kinetic solver, contacts and solver

Foam deformation for both internal dummy contacts (arm-torso), and dummy-seat cushion
depen_dems_2_amsa, Current Part: FS12231_M395_L-TORSO_FELIC_CAS

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Using the build-in MBD solver to extract initial conditions and avoid costly solver pre-runs
Integration

- All functionality provided both in GUI and through script
- All functions and dummy model data can be parameterized
- Can be integrated in fully automated processes driven by ANSA's Python scripting environment
Thank you