## COMPREHENSIVE SAFETY CAE FOR THE ALL-NEW VOLVO S90/V90/V90CC

Mathias Retzlaff<sup>\*</sup>, P-A Eggertsen, Johan Jergeus, Ingrid Jenshagen, Michelle Khoo, Domenico Macri, Ulf Westberg

Volvo Car Corporation, Sweden

## ABSTRACT-

Volvo Cars, the premium car maker, has cemented its position amongst the leaders of automotive safety innovation with its new S90 sedan and V90 wagon by being the first car maker to score a full six points in the Autonomous Emergency Braking for Pedestrians (AEB Pedestrian) test procedure and an overall 5 Star rating for both cars.

The S90/V90/V90CC cars are the second group of cars built on Volvo's SPA platform (Scalable Platform Architecture) and the development has continued to be very CAE oriented. New ways of working with CAE-tools and method development, such as windscreen modelling, new joining verification tests, head impact evaluation methods and pedestrian safety in early phases, have been developed in order to be capable of covering the complexity and accuracy of the CAE models.