SSIV 2015 – Program
22 June 2015, DSN, Rio de Janeiro, Brazil

Welcome	**09:00**
Technical Session 1 - Safety and Security of Intelligent Vehicles	**9:15 – 10:25**
Roberto Gallo. *On the Security of Critical Cyber-Physical Systems* **(Keynote Speaker)**	
Daniel Baraldi Sesso, Lucio F. Vismari, Antonio V. Silva Neto, Paulo Sérgio Cugnasca and João Batista Camargo Jr. *Using data integrity as an improvement characteristic to assess the safety of ADS-B-based systems*	
Coffee Break	**10:30 – 11:00**
Technical Session 2 - Collision avoidance and control on automotive and aerial vehicles	**11:00 – 12:20**
Thiago Toshio Matsumoto, Lucio Flavio Vismari, Ricardo Alexandre Veiga Gimenes, Jorge Rady De Almeida Jr and João Batista Camargo Jr. *A learning-based autonomous control system approach for collision avoidance within an unmanned aircraft*	
Benjamin Vedder, Jonny Vinter and Magnus Jonsson. *Using Simulation, Fault Injection and Property-Based Testing to Evaluate Collision Avoidance of a Quadcopter System*	
Dennis Böhmländer, Sinan Hasirlioglu, Vitor Yano, Christian Lauerer, Thomas Brandmeier and Alessandro Zimmer. Advantages in *Crash Severity Prediction using Vehicle to Vehicle Communication*	
Ian Esper and Paulo Rosa. *Adaptive Control System for a Fixed Wing UAV with Reduced Control Surfaces based on ANFIS*	
Lunch TIme	**12:30 – 14:00**
Technical Session 3 - Design issues for autonomous cooperating objects	**14:00 – 15:35**
Paulo Veríssimo. *From Embedded Systems to Autonomous Cooperating Objects: a long journey* **(Keynote Speaker)**	
Mikael Asplund. *Model-based Membership Verification in Vehicular Platoons*	
Valentina Bonfiglio, Leonardo Montecchi, Ivano Irrera, Francesco Rossi, Paolo Lollini and Andrea Bondavalli. *Software Faults Emulation at Model-Level: Towards Automated Software FMEA*	
Coffee Break	**15:45 – 16:15**
Technical Session 4 - Automotive safety through environment awareness	**16:15 – 16:45**
Jaime Armando Delgado Vargas and Paulo Roberto Gardel Kurka. *The use of a Graphic Processing Unit (GPU) in a Real Time Visual Odometry Application*	
Wilfried Steiner, Ayhan Mehmed and Sasikumar Punnekkat. *Improving Intelligent Vehicle Dependability By Means of Infrastructure-Induced Tests*	
Panel Session	**16:45 – 17:45**
Paulo Veríssimo, Roberto Gallo, Andrea Bondavalli, João Moreira. Challenges, *current solutions and research directions regarding safety and security of intelligent vehicles*	
Closing Session	**17:45 – 18:00**