International Conference and Exhibition

SIA CESA 5.0
Automotive electronics, components and systems for new mobility

PROGRAMME
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OUR EXHIBITORS

[List of exhibitors logos]
ABOUT CESA

SIA CESA 5.0 the international conference on automotive electronics, components and systems is taken place on 5 & 6 December 2018 in Versailles.

Our goal is to build the bridge between traditional automotive electronics and the new developments in vehicle electrification and digitalization as well as those from the world of consumer electronics and the Internet of Things.

This is a major opportunity to understand how the automotive business will evolve over the next five years, with a focus on products and services that are likely to transition from other markets into use-cases for automotive.

Electronics content is growing in every product thanks to miniaturization of circuits, new business models, new actors and beyond this a changed perception of the environment which has consequences for industry in general, not only for the automotive one.

SIA CESA is an event that explains the technological breakthroughs, technical barriers and other influencing factors for our industry such as standards, rules and laws.

Engineering and business unit managers as well as technical experts from the automotive world are gathered today to exchange on these subjects with colleagues from adjacent domains such as infrastructure, communication, Telco providers, insurance, consumer electronics and law.

Our sponsors and partners will show in a dedicated exhibition area their latest products and technologies contributing to the future of the automobile industry.

Thank you for your participation in this great event!

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STMicroelectronics

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BASTIEN Rémi, Renault
CARRIE Heiko, Bosch
DEVAUCHELLE Guillaume, Valeo
GOHIN Carla, Groupe PSA
GROS Hervé, SIA
MARBACH Luc, VEDECOM

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# Programme 5 December 2018

## Change the Industry: Automotive Electronics

**Welcome:**
Hervé Gros, SIA

### Sessions

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<td>CESA Opening</td>
<td>Jochen LANGHEIM, ST Microelectronics</td>
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<td>09:10</td>
<td>Electronics, a key technology for the car of tomorrow</td>
<td>Marc MORTUREUX, General Manager - PFA</td>
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<td>09:30</td>
<td>The car of tomorrow, a key application for electronics</td>
<td>Thierry TINGAUD, President Strategic Committee Electronics &amp; President STMicroelectronics France</td>
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<td>10:00</td>
<td>Innovation, cooperation in connected, autonomous e-mobility</td>
<td>Rémi BASTIEN, VP Renault and President - MOVEO &amp; VEDECOM</td>
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<td>10:30</td>
<td>Round Table</td>
<td>Rémi CORNUBERT, Senior Partner - Advancy; François GAUILLARD, Head of autonomous and connected cars - Groupe PSA; Gilles MABIRE, Président - Continental France; Colette MALONEY, Head of Unit - European commission DG CNCT; Jean-Louis PECH, CEO ACTIA</td>
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<tr>
<td>11:15</td>
<td>COFFEE BREAK IN THE EXHIBITION</td>
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<td>11:45</td>
<td>Mobility disruptions: E-mobility in general</td>
<td>Chairman: Pierre Lebrun, Valeo</td>
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<td>12:00</td>
<td>Contribution of light and heavy vehicles to reducing energy demand and CO₂ emissions by 2035 worldwide</td>
<td>Jean Luc BROISSARD, PFA; Gabriel DUQUESNOY, BIPE</td>
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<td>12:15</td>
<td>An economic view on Electromobility in China</td>
<td>Peter GRESCH, Jochen SIEBERT, PGUB &amp; JSC</td>
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<td>12:15</td>
<td>Batteries and BMS Industrialisation of batteries - what is needed in France and Europe</td>
<td>Marianna CHAMI, CEA; Jean Bernard LEPAGE, Faurecia</td>
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<td>12:30</td>
<td>Infrastructure needed to implement electric mobility</td>
<td>Joseph BERETTA, Averse; Yuhui XIONG, Bipe</td>
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<td>12:45</td>
<td>Panel discussion</td>
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<td>Lunch break in the exhibition</td>
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<td>13:30</td>
<td>Organisation &amp; competence disruptions in E-mobility: Charging, infrastructure, engineering</td>
<td>Chairman: Jean-Luc Brossard, PFA</td>
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<td>14:15</td>
<td>Trends in electric vehicle design: Insights on best practices for paving the road for mass-market electric vehicles</td>
<td>Thomas MOREL &amp; Mauro ERRIQUEZ, McKinsey &amp; Company; Pierre-Yves MOULIERE, A2Mac1</td>
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<td>14:15</td>
<td>Autonomous driving &amp; mobility in general (with look on intermodality)</td>
<td>Patricia VILLOSLADA, Transdev</td>
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<td>14:15</td>
<td>Exploitation of road infrastructure and traffic management:integrate the connected car</td>
<td>Jean Laurent FRANCHINEAU, VEDECOM</td>
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<td>14:15</td>
<td>Using AI to remove the roadblocks for AV</td>
<td>Amir KLUG, STMicroelectronics</td>
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<td>14:15</td>
<td>Europe Prepares for Mass Deployment of C-ITS</td>
<td>Onn HARAN, Autotalks</td>
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<td>14:15</td>
<td>Mobility disruption: V2X &amp; infrastructure / architecture</td>
<td>Chairman: El Khamis Kadiri, PSA</td>
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<tr>
<td>14:30</td>
<td>From ICE to EV: the competition is also about competences and engineering approach</td>
<td>Patrick BASTARD, Groupe Renault</td>
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<td>14:45</td>
<td>AllCharge - an User-Centric Solution for Traction and Charging</td>
<td>Christophe MARECHAL, Friedrich GRAF &amp; Martin BRULL, Continental</td>
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<td>15:00</td>
<td>High Power Charging – more than a thermal challenge</td>
<td>Michael ZEYEN, Vancom</td>
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<td>AUTONOMOUS DRIVING CHALLENGE: HUMAN FACTORS &amp; ROAD SAFETY</td>
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<tr>
<td>16:00</td>
<td>Introduction about road safety and ADAS &amp; comparison with aeronautics</td>
<td>Anne GUILLAUME, LAB</td>
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<td>16:10</td>
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<td>16:30</td>
<td>VEDECOM experiments on taking control back</td>
<td>Mercedes BUENO-GARCIA, VEDECOM</td>
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<td>16:45</td>
<td>Benefits and limits of autonomous vehicles</td>
<td>Pierre-Jean LE SEC, UTAC CERAM</td>
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<td>17:00</td>
<td>Making sense of V2X: Communications industry vs. automotive industry vs. DSRC vs. C-V2X vs. USA vs. Europe vs. China</td>
<td>Kevin THOMPSON, Keysight</td>
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<td>COFFEE BREAK</td>
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<td>18:00</td>
<td>Keynote and discussion with Patrick Pelata</td>
<td>Patrick PELATA, former COO of Renault and EVP of Nissan</td>
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<td>18:30</td>
<td>COCKTAIL</td>
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## PROGRAMME 6 DECEMBER 2018

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| 08:30 | **Introduction**  
Jean-Luc BROSSARD, PFA |
| 08:50 | **KEYNOTES**  
Chairman: Hervé Gros, SIA |
| 08:50 | The future of automotive with Electronics seen by an OEM  
Carla GOHIN, Head of Research, Innovation and Advanced Technologies, PSA Groupe |
| 09:10 | The future of automotive with Electronics seen by a Tier 1  
Jean-François TARABBIA, Senior Vice-President, Research & Development and Product Marketing - Valeo |
| 09:30 | **COFFEE BREAK IN THE EXHIBITION** |
| 10:00 | **SPECIAL SESSION:** SMART ELECTRONICS SYSTEMS  
Chairman: Wolfgang Gessner, VDI/VDE  
**SPECIAL SESSION:** PHOTONICS  
Chairman: VEDECOM  
**SPECIAL SESSION:** AIOI  
Chairman: François Fischer, ERTICO |
| 10:00 | Smart electronics systems : the challenges of interconnexion  
Thomas BEAUCHENE, Raydiall |
| 10:00 | Market Overview Photonics in Automotive  
Nok WONGWANCHAI, Epic |
| 10:00 | Autonomous car service for Tourists in Versailles  
Gilles LE CALVEZ, Vedecom |
| 10:20 | Opportunities in Advanced Sensors in Perception & Machine Cognitive function  
Ken BRIZEL, ACAMP |
| 10:20 | Challenges in optical devices for Lidar  
Laurent DEMEZET, Hamamatsu |
| 10:20 | Automotive meets ICT – enabling the shift of value creation supported by European R&D  
Eric ARMENGAUD, AVL |
| 10:40 | Data analysis / Application of neural networks in industry, automotive and medical applications for predictive maintenance and increased customer value  
Philipp SCHMID, CSEM |
| 10:40 | VCSEL technology for automotive sensing  
Holger MOENCH, Philips |
| 10:40 | Autonomous Driving: Cybersecurity Risk Analisys  
Vincenzo DI MASSA & Gianluca MANDO, Thales |
| 11:00 | Energy Management, Temperature Management, Reliability and integration of smart systems  
Sven RZEPKA, Fraunhofer ENAS |
| 11:00 | Packaging of optical components  
Ignazio PIACENTINI, Ficontec |
| 11:00 | IOT in automotive  
David ROIÉ, Valeo |
| 11:20 | **Panel discussion** |
| 11:20 | **TECHNOLOGY DISRUPTIONS IN E-MOBILITY: BATTERIES**  
Chairman: Philippe Aumont, SIA  
**DEVELOPMENT CHALLENGE:** TESTING, VALIDATION, SIMULATION  
Chairman: Pierre-Yves Geels, Segula Matra Automotive  
**MOBILITY DISRUPTION:** LEGAL, PEOPLE, SOCIETY, PRIVACY, INSURRANCE  
Chairman: Jean-Laurent Franchineau, VEDECOM |
| 11:20 | Silicon based high performance EV batteries  
Yohan OUDART, Nanomakers |
| 11:20 | Interaction of Simulation and Proving Ground Test for Autonomous Driving Functions  
Hans-Peter SCHONER, Daimler |
| 11:20 | Autonomous and connected car - new usages, new threats, new police processes  
Colonel Julien BURLET, Gendarmerie Nationale |
| 11:40 | Electronic system to detect gas or cooling liquid leakage, smoke and overtemperature in the battery tray for electric or hybrid vehicles  
Lionel BITAULD & Joseph BOSNIJAK, Dura |
| 11:40 | Automotive Radar testing taken to new dimensions  
Sherif AHMED, Rohde&Schwarz |
| 11:40 | The GDPR and its application in IoT and connected car - opportunities for business and competitiveness  
Gaelle KERMORGANT, Jurist |
| 12:00 | **Battery Management System**  
Xavier FORNARI, Ansys |
| 12:00 | Test of connected and autonomous vehicles  
Alain PIPERNO, UTAC |
| 12:00 | The GDPR and its application in IoT and connected car - opportunities for business and competitiveness  
Gaelle KERMORGANT, Jurist |
| 12:20 | A revolutionary method for decreasing cell self-discharge measurement from months to hours  
Oliver ZURANSKI, Keysight |
| 12:20 | Smart charging management for fleets and car pools  
Dirk GROßMANN, Vector |
| 12:20 | Panel discussion with Jacques AMSE-LEM - Allianz and the speakers of the session |
| 13:00 | **Panel discussion** |
TDK Technology Driving new mobility.

- **TMR angle and motion sensors** for high-precision demands
- **Hall sensors and integrated controllers** for small brushless DC and stepper motors
- **Pressure sensor dies** with long-term stability
- **PiezoHapt™ and PowerHap™ piezo actuators** with haptic feedback for multiple waveforms

### PROGRAMME 6 DECEMBER 2018

#### 13:10 > LUNCH IN THE EXHIBITION

**ELECTRONICS COMPONENTS AND SYSTEMS**  
Chairman: Pascal Ribot, STMicroelectronics

**AUTONOMOUS DRIVING CHALLENGE: ENVIRONMENT PERCEPTION**  
Chairman: Antoine Lafay, Valeo

**MOBILITY DISRUPTION: SECURITY & CAR ARCHITECTURES**  
Chairman: Pierre Lebrun, Valeo

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#### 14:30 > 14:50

14:30 > Control Architecture for an Autonomous Shuttle  
Hadj Hamma TADJINE, IAV

14:30 > Are LIDARs ready for perception in future intelligent transportation?  
Diego PUSCHINI, CEA  
Cem KARAGOUZ & Oussama EL ZAOUI, Transdev

14:30 > Uptane - Open specification for securing OTA software updates for automotive electronics  
Georg MÜLLER, Airbiquity

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Cem KARAGOUZ & Oussama EL ZAOUI, Transdev                                                   | Richelieu Room       |
| 14:30 | Uptane - Open specification for securing OTA software updates for automotive electronics   | Georg MÜLLER, Airbiquity                                                                    | Richelieu Room       |

#### 14:50 > 15:10

14:50 > A Graphical Modeling Framework to Facilitate Scheduling in Time-Sensitive Networks  
Morteza HASHEMI FARZANEH, TU Munich

14:50 > Scalable sensor fusion for safe decision making from collision avoidance up to level 5  
Andre ROGER & Alexandre ENGELSTEIN, Infineon

14:50 > Cybersecurity for Connected Vehicle with AGL (Automotive Grade Linux)  
Fulup LE FOLL, IOT.BZH

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#### 15:10 > 15:30

15:10 > A modular and flexible approach for autonomous driving  
Kai WANG, Visteon

15:10 > DENSE: environment perception in bad weather - first results  
Werner RITTER, Daimler

15:10 > Over the air – how simple is it really?  
Jens KÜBLER, Dirk GROßMANN & Olivier GERLACH, Vector

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#### 15:30 > 15:50

15:30 > A true key less entry system and biometric driver authentication for safe car sharing  
Eric DURAND & Thomas FARGES, Dura

15:30 > Drive4U Locate: affordable precise and robust localization and mapping for Automated Driving  
Paulo RESENDE, Kishun JO & Benazouz BRADAI, Valeo

15:30 > Intrusion Detection Systems on Future Automotive Networks  
Michael HERMANN & Jan HOLLE, Escrypt

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#### 16:00 > COFFEE BREAK IN THE EXHIBITION

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#### 16:30 > 17:30

16:30 > Conclusions of CESA  
Gaspar GASCON ABELLAN, EVP engineering - Groupe Renault / President of the French Automotive Technical Committee

17:30 > Farewell  
Jochen LANGHEIM, CESA’s president

17:30 > End of SIA CESA 2018
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