

PARADIGM SHIFT?

27th International
Colloquium of
Gerpisa

THE AUTOMOTIVE INDUSTRY IN TRANSITION

11-14 June 2019

ENS Paris-Saclay



**ORGANIZATION
COMMITTEE**

Tommaso Pardi, CNRS-IDHES, GIS-GERPISA
Géry Deffontaines, GIS GERPISA, ENS Paris-
Saclay

**ORGANIZATION
TEAM**

Géry Deffontaines, GIS-GERPISA, ENS Paris-
Saclay
Géraldine Thouvoy, MSH Paris-Saclay

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**GIS GERPISA
INTERNATIONAL
NETWORK**

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27TH INTERNATIONAL GERPISA COLLOQUIUM

11-14 June 2019

Paris, France

During the last three years we have been exploring how the new frontiers of the automotive industry are transforming the way cars are conceived, produced, used and regulated. We have been debating the nature, the pace and the long-term consequences of these transformations; whether they are disruptive or evolutionary; whether they are driven by new or traditional actors. We have highlighted the theoretical and methodological challenges raised by the following kind of phenomena: much of the debated changes within the auto industry currently represent only small and marginal change, yet any of the forces could well grow and change the industry profoundly; the assumption that the knowledge accumulated on the past trajectory of industries and firms may not be pertinent going forward in order to understand what is happening as changes are brought by technologies and firms from outside the automotive industry, notably by digital companies; and the difficulty of working on forecasts and expectations, whose predictability and performativity are by definition debatable and uncertain. For the 27th international colloquium of GERPISA we propose to address these issues and questions from the perspective of a common empirical and theoretical question: is the automotive industry going through a paradigm shift?

When we look at the electrification of cars, the promise of autonomous vehicles, the spreading of new forms of mobility, and the prospects for smart factories what do we see? Are we dealing with a new paradigm in the making? Or are these technological developments still grounded in the existing technological paradigm, pushing the boundaries of digitalization to its limits? How will this technological race towards EVs and AVs play out? How will the structuring of new value chains for the production of EVs impact the geopolitics of the automotive industry? How will the digitalization of the AV redistribute value capture between software and hardware makers? Who will be the winners and who will be the losers? How are these technological transformations affecting global value chains? How do they transform labor and work? Do they create new opportunities for technological and social upgrading in emerging countries? Or do they rather reinforce the hegemony of “global north” multinational companies over intellectual property and value creation? Are there alternative patterns of technological development for emerging countries and their automotive industries? If yes, what kind of firm strategies and government regulations could promote them?

The GIS GERPISA invites social science researchers, representatives of the industry, public policy makers and advisers, union representatives and consultants to debate these crucial questions for the present and the future of the automotive sector at its 27th International Colloquium.

Tuesday 11th of June 2019



Factory tour Renault Technocentre

Only for those who have registered

**07:00 Meeting point at Gare du Nord
(RER B station)**

07:15 Departure

**09:00 PLASTIC OMNIUM AlphaTech R&D
center visit**

12:00 Lunch at AlphaTech

13:30 Departure to PSA Hordain

15:00 Factory tour PSA HORDAIN

17:30 Departure to Paris

20:00 Dinner at the restaurant Bouillon Racine,
3 rue racine, Paris

Contact:

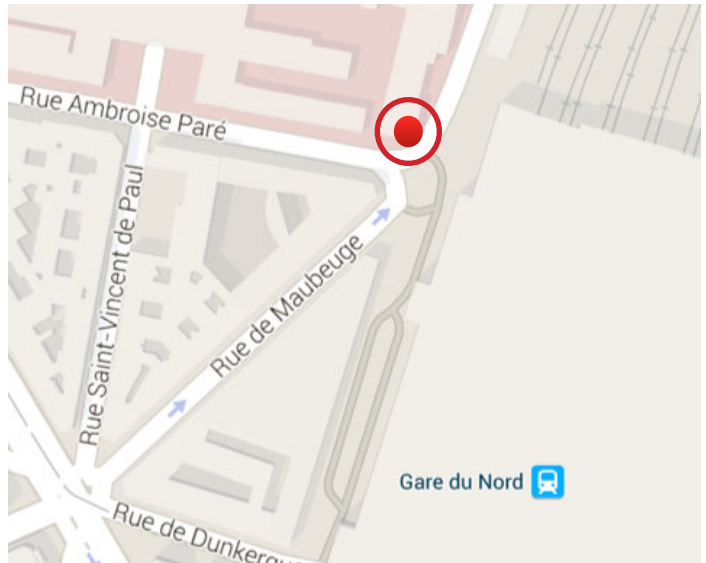
Gery Deffontaines: **+33 6 12 89 27 83**

Tommaso Pardi : **+33 6 63 89 23 68**

(also available on WhatsApp and Skype -
tommasopardi)

Important note:

You must wear closed shoes, no high heels.



Wednesday

12th of June, 2019

08:00 – 08:45

Welcome of participants

08:45 - 09:00

Room : **Amphi Marie-Curie**

Opening

TOMMASO PARDI, director of GERPISA

09:00 – 10:30

▶ Parallel sessions

Session n°: 1

Room : **Amphi Marie-Curie**

Chair : BRUCE BELZOWSKI, University of Michigan
Transportation Research Institute

- ADRIANA MAROTTI DE MELLO & ROBERTO MARX
Who drives the change? Transitions for Sustainable Mobility and the role of Automotive Industry
- HEIKE PROFF
Impact of new technologies in the automotive industry
- Measuring the profit impact of digitalisation
- MIKE SMITKA
Technology and the Motor Vehicle Industry

Session n°: 2

Room : **Satie**

Chair : TOMMASO PARDI, CNRS-IDHES, GIS-GERPISA

- ADRIANA MARTINEZ & TANIA MEDEL GARCIA
A perception of Industry 4.0 and the needed labour profile: an exploratory study in auto parts firms in Guanajuato, Mexico
- LORENZA MONACO, JASON BELL & JULIUS NYAMWENA
The political economy of technological change: transitioning to 4.0 in plastic auto components in South Africa and Thailand
- MARGHERITA RUSSO, PASQUALE PAVONE & ARMANDA CETRULO
From wage bargaining to the negotiation on “cognitive surplus value”: reflections on a laboratory for Industry 4.0 in Lamborghini.

Session n°: 3

Room : **Amphi Fortunato**

Chair : GIUSEPPE GIULIO CALABRESE, CNR-IRGRES

- Garbellini, N.
European production chains : the new geography of automotive
- ALICE MILOR
Struggling Paradigms: the takeover of French suppliers by the Japanese firms (1980-1984)

- THOMAS KLIER & JIM RUBENSTEIN
Powertrain sourcing in the automobile industry: The role of scale and geography in North America

10:30 – 11:00

Coffee break

11:00 – 12:30

▶ Parallel sessions

Session n°: 4

Room : **Amphi Marie-Curie**

Chair: HEIKE PROFF, University of Duisburg

- TAKAHIRO FUJIMOTO
Balancing the power of global network and the power of local/asset knowledge
- VINCENT FRIGANT & MARTIN PAQUETTE
Canaries in the coal mine: how do newcomers participate to the growth of new niches in the automotive industry?
- PIN ZHOU & HUA WANG
Manage the Organizational Change to Build the Smart Car in China A Study of SAIC-Alibaba Joint Venture

Session n°: 5

Room : **Satie**

Chair : MARTIN KRZYWDZINSKI, WZB

- MATTEO GADDI
Working conditions and labour organisation within Italian FCA plants
- GIOVANNI BALCET & GRAZIA IETTO-GILLIES G.
Internationalization, outsourcing and labour fragmentation. The case of FIAT
- THOMASZ OLEJNICZAK & MASATO ITOHISA
Come for the low wages, stay for the people: Labour relations and the adoption of Industry 4.0 in Japanese automotive plants in CEE

Session n°: 6

Room : **Amphi Fortunato**

Chair : THOMAS KLIER, Federal Reserve Bank of Chicago

- MARTIN SCHROEDER, HIDEO KOBAYASHI & MASAOKI FUTAGI
Supporting Role in Global Research and Development Networks: Automotive Technology Centres in Viet Nam
- MIKA SMITKA
China's "Auto Belt:" Implications for Assembler Competitiveness
- SHAHADAVE SHRESTHA
Process of automobile cluster development in India: Case of Maruti Suzuki

Wednesday

12th of June, 2019

12:30 – 14:00

Lunch

14:00-15:30

► Plenary session I. The future of batteries

Chair : TOMMASO PARDI, CNRS-IDHES, GERPISA



PATRICK BASTARD

DIRECTOR OF RESEARCH
RENAULT

NICOLAS LECLERE

HEAD OF ELECTRIFICATION
PSA

15:30 – 16:00

Coffee break

16:00 – 17:30

► Parallel sessions

Session n°: 7

Room : **Amphi Marie-Curie**

Chair : GÉRY DEFFONTAINES, GERPISA

- MARC DIJK
The emergence of electric mobility between 1995 and 2015 in the Netherlands: evidence of a transition pathway
- MICHAËL FERNANDEZ
The FCEV deployment in the Japanese transport and mobility sector: a revolution?
- TAKUYA HASEGAWA
A Fermi estimate of economic rationality: back-casting the way forward to zero-emission society and the roll of automotive industry

Session n°: 8

Room : **Satie**

Chair : FRANCESCO GARIBALDO, "Claudio Sabattini"

Foundation

- ANTHONY D'COSTA
Long Waves and Techno-economic Paradigms: Assessing the Future of Work in the Indian Automotive Industry
- LISA DORIGATTI & MATTEO RINALDINI
World Class Involvement: Workers' Participation in a 4.0 Lean Production System

- MIAO TIAN
Temporary Labor and Labor Conflicts in the Joint Ventures of VW and Toyota in China

Session n°: 9

Room : **Amphi Fortunato**

Chair : VINCENT FRIGANT, Université de Bordeaux

- ANA VALERIA CARNEIRO-DIAS
From modularity to agile project management: an essay on methods and practices from IT to automobile industries
- GIUSEPPE GIULIO CALABRESE
Women and cars joys and sorrows? Female directors and firm performance in the Italian supply chain
- TIMO GÜNTNER, JOSIP JOVIC & HEIKE PROFF
Use of Market Opportunities in Aging Societies – the example of advanced driver assistant systems

Thursday

13th of June, 2019

08:30 – 09:00

Coffee & late admission

09:00 – 10:30

▶ Parallel sessions

Session n°: 10

Theme 2

Room : **Amphi Marie Curie**

Chair : HUA WANG, KEDGE Business School

- MARIA JULIANA FORERO
Electric vehicles charge optimization for the electric system, taking into account drivers behavior
- PAAL BREVIK WANGSNES, STEEF PROST PROOST & KENNETH LØVOLD RØDSETH.
Coordinated energy and transport policies for electromobility: The case of Norway
- ALEXANDRE FAURE & SOICHIRO MINAMI
Urban transport policy for promotion of electric vehicles in France

Session n°: 11

Theme 5

Room : **Satie**

Chair : MARTIN KRZYWDZINSKI, WZB

- FRANCESCO GARIBALDO
Marchionne's legacy
- DAVIDE BUBBICO, DANIELE DI NUNZIO & GIULIANO FERRUCCI
Working conditions in the FCA, CNH and Magneti Marelli plants: a survey questionnaire
- JEAN-CHRISTOPHE SCILLEN
The theory of social exchange, a new explanatory paradigm of perceptions relating to the closure of automotive factories : a historical analysis of Renault Billancourt and (1989) and PSA Aulnay (2012)

Session n°: 12

Theme 3

Room : **Amphi Fortunato**

Chair : ADRIANA MAROTTI DE MELLO, University of São Paulo

- ELISABETH SVENNEVIK
Crossing pathways: Personal urban mobility analysis
- GANDIA, R. M., OLIVEIRA J. R., ANTONIALI F., PATRÍCIO L. B., YUTAKA J. Y., NICOLAÏ I., OLIVEIRA, I.R.C.
Casual Carpooling as a Strategy to Implement Mobility-as-a-Service (MaaS) in a Developing Country

- BRUNO FAIVRE D'ARCIER & YVELINE LECLER
Round-Trip and One-Way car-sharing in France and Japan: Conditions for markets take-off

10:30 – 11:00

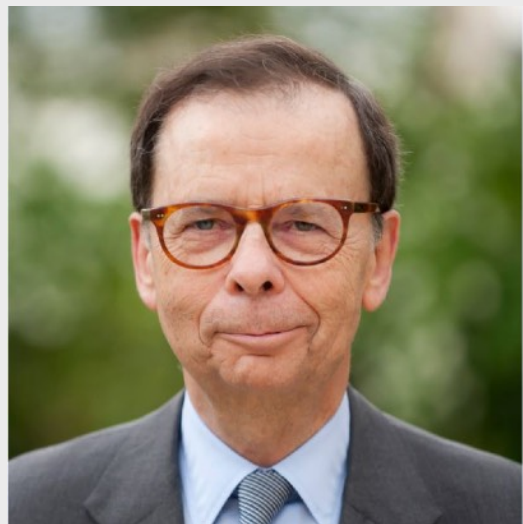
Coffee break

11:00 – 12:30

▶ Plenary session II. An experienced eye on the future of the car industry

Chair : TOMMASO PARDI, CNRS-IDHES, GERPISA
Keynote speaker:

LOUIS SCHWEITZER, FORMER CEO OF RENAULT (1992-2005)



12:30 – 14:00

Lunch

Thursday

13th of June, 2019

14:00 – 15:30

▶ Parallel sessions

Session n°: 13

Room : **Amphi Marie Curie**

Chair : MICHAEL SMITKA, Washington and Lee University

- HOLGER BUNGSCHKE
Worlds Apart? Domestic and Global Strategies of Japanese Automobile Manufactures for Spreading Ecological Cars
- TAKEFUMI MOKUDAI
In search of strategic flexibility in shifting towards electrification: A comparative analysis of Toyota and Nissan from a real options reasoning perspective
- THÉODORE DE CAMPIGNEULLES, CHRISTOPHE MIDLER, & RÉMI MANIAK
From product to service offering: the OEM's transition to mobility services

Session n°: 14

Room : **Satie**

Chair : ELSIE CHARRON, CNRS

- GUENDALINA ANZOLIN, ANTONIO ANDREONI & ANTONELLO ZANFEI
Racing with (or without) the machine: Robot adoption and FDI driven transformation in the automotive industry
- HYUNG JE JO & MARTIN KRZYWDZINSKI
Skill Formation Strategies. A Comparison of Two MNCs' Overseas Factories in Central Eastern Europe
- JORGE CARRETO SANGINÉS, MARGHERITA RUSSO & ANNAMARIA SIMONAZZI
The impact of digital transformation in the automotive supply chain in Mexico

Session n°: 15

Room : **Fortunato**

Chair : ROBERTO MARX, University of São Paulo

- AI NISHIMURA
Mobility and Space Utilization: Regulations Concerning Transportation in Urban Development Plans
- BEATRIZ GOMES RODRIGUES, LIDYANE STEPHANE DA SILVA BARROS & PRYSCILLA APARECIDA VAZ DE OLIVEIRA
Public transport integration: a proposal for a single transit fare in Rio Janeiro city
- SOICHIRO MINAMI, HIGASHI, HIDETADA & TETSUO AKIYAMA
The Growth of Ridesharing Service in Japan from viewpoint of relation with Institution, Regulation and Technology

15:30 – 16:00

Coffee break

16:00 – 17:30

▶ Parallel sessions

Session n°: 16

Room : **Amphi Marie-Curie**

Chair : YANNICK PEREZ, Centrale Supélec

- Marc Alochét & Christophe Midler
How is the emerging e-traction value chain shaped by EV scale-up?
- HUA WANG & CHUANJUAN WU
Analyzing Supply Chain Complexity and Agility in Building EVs in China
- WEI ZHAO
Constructing a Value Chain from below: Emergence of NEV Battery Manufacturing and Advanced Cluster Policy in the Pearl River Delta, China

Session n°: 17

Room : **Satie**

Chair : BRUNO JETIN, University of Brunei Darussalam

- EMILIO BARALDI & PAULO C. KAMINSKI
The recall and how the lessons learned can be used
- KRIENGGKRAI TECHAKANONT, HOMKLIN TASSANEE & THANA PHAMARANON
Where have all old cars gone?: Roles of the informal sector in treating the end-of-life vehicles in Thailand
- SO SASAKI & YUTAKA ASAZUMA
Automobile Market Analysis in Myanmar

Session n°: 18

Room : **Amphi Fortunato**

Chair : YVELINE LECLER, Université de Lyon, Sciences Po

- PHILIPPE BYOSIERE
Multiple-faceted mixed blessings of “delivering” people and goods in the platform economy: Comparing implications and challenges between Japan and the EU Low Countries.
- HIDETADA HIGASHI & SOICHIRO MINAMI
The Architecture of Mobility as a Service (MaaS): Dichotomy of Global Platform and Local Integration
- MATHILDE ABEL
From Uber to local commuting platform: digital platforms at the center of a “theoretical representation crisis”, case study of the mobility sector in France

Friday

14th of June, 2019

08:30 – 09:00

Coffee & late admission

09:00 – 10:30

▶ Parallel sessions

Session n°: 19

Room : **Amphi Marie-Curie**

Chair : GÉRY DEFFONTAINES, GERPISA

- BRUNA HABIB CAVAZZA, THAIS ASSIS DE SOUZA, ANDRÉ LUIZ ZAMBALDE
Innovation Radar for Disruptive Technology Insertion: The Case of Autonomous Vehicles in Brazil and France
- GIULIA MARCOCCHIA
The alignment process toward autonomous connected mobility ecosystem structuring. Lessons learnt on the incumbents' side
- GREG MORDUE
Will Ethics-Based Challenges and the Failure of Policy Makers to Intervene Ultimately Derail the Proliferation of High Level Autonomous Vehicles?

Session n°: 20

Room : **Satie**

Chair : BOLESŁAW DOMANSKI, Jagiellonian University

- TOSHIYUKI BABA
How Brazilian international competitiveness changed after the Inovar-Auto policy: comparison of the international competitiveness of auto-parts in Brazil with other countries
- MARTIN SCHROEDER
Emerging country newcomer supply chain formation: the case of Vinfast
- RAPHAEL DA LIMA
Interfirms Governance in the automotive sector: a case study in southern Rio de Janeiro

Session n°: 21

Room : **Fortunato**

Chair : TAKAHIRO FUJIMOTO, University of Tokyo

- MARC ALOCHET & CHRISTOPHE MIDLER
EV Scale Up, from Product Modularity to Mobility Versatility
- BRUNO JETIN
Who will control the electric car market?
- SERGIO MUNIZ, BRUCE BELZOWSKI, JANGHWAN ZHU, JACKLYN SHIN, RODRIGO FERREIRA
Automakers' Electric Vehicle Platform Strategies and its Impacts on Battery Package Design and Thermal Management System

10:30 – 11:00

Coffee break

11:00 – 12:30

▶ Parallel sessions

Session n°: 22

Room : **Amphi Marie Curie**

Chair : MARC ALOCHET, Ecole Polytechnique

- GÓMEZ MAÑAS & ADRIÁN PABLO
How cities' actors prepare for the possible arrival of autonomous vehicles. A study about the Paris metropolis.
- T. A SOUZA, B. H CAVAZZA., R. M GANDIA., J. Y SUGANO, & I. NICOLAÏ
Autonomous vehicles as an emergent innovation: governance through the lens of the quadruple helix
- SYLVIE MIRA-BONNARDEL & DANIELE ATTIAS
Autonomous vehicle for flexible public transportation systems: towards a shared on demand mobility

Session n°: 23

Room : **Satie**

Chair : BERNARD JULLIEN, Université de Bordeaux

- XIAOXIANG DENG
Problematisation and Politicization of Technical Indicator Tools: A Case Study of Used Car Restriction Policy In China
- T. FUKUDA
Public Policies and Ethnic Entrepreneurs Dealing Used Cars and Car Parts from Japan to the Global Market: Focusing on Pakistani and South Asian Transnational Migrants
- KATSUNORI OKAMOTO & YUTAKA ASAZUMA
Influence on used cars trade from Japan, which is brought about by port promotion policies : Case of Fushiki-Toyama Port and Kobe Port

Session n°: 24

Room : **Amphi Fortunato**

Chair : THOMAS KLIER, Federal Reserve Bank of Chicago

- BRENDAN SWEENEY & MORDUE GREG
The Categorization and Assessment of Industrial Policy: Automotive Policy in the Semiperiphery
- BOLESŁAW DOMANSKI, KRZYSZTOF GWOSDZ & AGNIESZKA SWIGOST
Evolution of public policies towards automotive industry in Poland
- TAKATOSHI MURAYAMA & SHINYA ORIHASHI
Challenges of the less developing region of automobile industry in Japan: A case of the Japanese Tohoku

Friday 14th of June, 2019

14:00 – 15:30

▶ Parallel sessions

Session n°: 25

Room : **Amphi Marie-Curie**

Chair : GÉRY DEFFONTAINES, GERPISA

- JEEHOON KI
Comparison of Autonomous Vehicle Policy Among France, Japan, and Korea: An Analysis through the Lens of Sectoral Innovation System
- B. H. CAVAZZA, T. A. SOUZA, R. M. GANDIA, A. L. ZAMBALDE, I. NICOLAÏ & A. M. NETO
Critical Success Factors for the insertion of Autonomous Vehicles as a Product Service System in a country
- FABIO ANTONIALLI
International Benchmark on Experimentations with Autonomous Shuttles for Collective Transport

Session n°: 26

Room : **Satie**

Chair : HOLGER BUNGSCHKE, School for International Studies, Kwansai Gakuin University

- MARCOS DE C. MARQUES & FLAVIA CONSONI
Governance and Policies to Foster Low Emission Vehicles in China, EUA and Japan
- SAMUEL KLEBANER
Managing regulations: the integration of the air pollutant emissions limits in the car manufacturers economic activities
- YUTAKA ASAZUMA, K. OKAMOTO & K. TOGAWA
Current Status and Problems of Japanese Automobile Recycling System

Session n°: 27

Room : **Amphi Fortunato**

Chair : SIGFRIDO RAMIREZ, Max Planck Institute for European Legal History Frankfurt

- ARNULFO ARTEAGA-GARCÍA, AURORA MARCIAL-FLORES & SAMUEL ORTIZ-VELÁSQUEZ
China in the automotive industry in Mexico: perspectives and challenges in the transition from NAFTA to USMCA
- AURORA MARCIAL-FLORES
From NAFTA to USMCA: conditions and challenges of automotive financing in Mexico.
- GIULIO CASTELLANOS & CLOTILDE HERNÁNDEZ GARNICA
Implications of the USMCA of November 2018 in the automotive industry installed in Mexico.

15:30 – 16:00

Coffee break

16:00 – 18:00

Room : **Amphi Marie Curie**

▶ Plenary session III. From the new frontiers to the new worlds of the automotive industry: the problem of disruption



SIGFRIDO RAMIREZ
RESEARCHER AT THE
MAX PLANCK INSTITUTE

TOMMASO PARDI,
DIRECTOR OF GERPISA

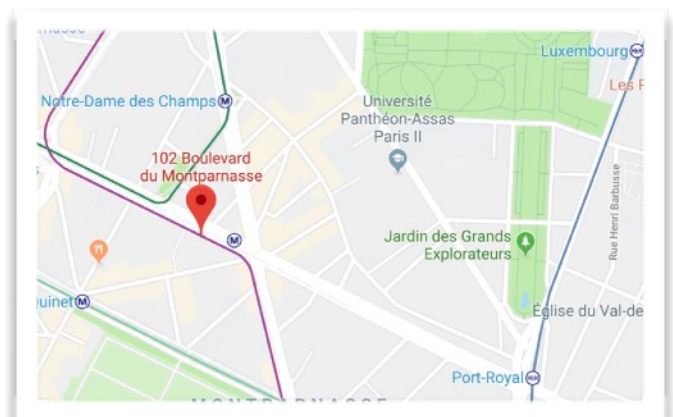
20:00

Gala Dinner

Restaurant LA COUPOLE

102, Bld du Montparnasse
75014 Paris

RER Port-Royal / Metro Vavin / Metro Notre-Dame des Champs



GIS GERPISA

Groupement d'Intérêt Scientifique

Ecole Normale Supérieure de Paris-Saclay



MEF (Ministère de l'Économie et des Finances)

Julien TOGNOLA – Chef du service de l'Industrie à la DGE

Emmanuel CLAUSE – Chargé de mission Innovation/transport

MTES (Ministère de la Transition Ecologique et Solidaire)

Serge BOSSINI – Directeur de la recherche et de l'innovation

Arantxa JULIEN - Chargé de Mission Réseaux Mobilité et Modes de Vie



Comité des Constructeurs Français d'Automobiles

CCFA

Christian PEUGEOT – Président du CCFA

Pierre-Louis DEBAR – Directeur économie, statistiques et transports du CCFA



FIEV

Claude CHAM – Président de la FIEV

Franck FONTANESI – Directeur économie et statistiques de la FIEV



ENS Paris-Saclay

Pierre-Paul ZALIO – Président de l'École Normale Supérieure de Paris-Saclay



● Welcome area Gerpisa International Colloquium (D'Alembert building, first floor, Amphi Marie Curie)

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