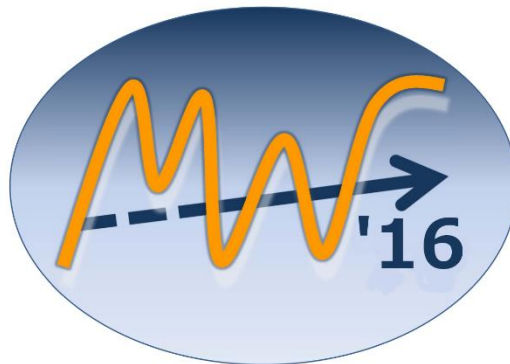


**March 30-31 and April 1, 2016 –  
Paris (France)**



***Seventh International Conference MAF 2016***  
***Mathematical and Statistical Methods***  
***for Actuarial Sciences and Finance***

**PROGRAM**

GENERAL INFORMATION

- 25 minutes for each talk, discussion included.
- Chair of each session, except the organized ones: the first speaker of the session.
- Upload all the presentations at the beginning of the session.

# March 30, 2016

## **Registration & Coffe Break (March 30, 2016)**

09:15-10:15

### **Room Raymond Aron**

#### **Conference openings (March 30, 2016)**

10:15-10:55

#### **PARALLEL SESSIONS (March 30, 2016)**

##### **Room Raymond Aron**

###### **Portfolio**

11:00-12:15

Klebaner, Landsman, Makov, Yao  
*Optimal portfolios with downside risk*

Cerqueti, Lupi  
*A network approach for risk theory and portfolio selection*

Sidorov, Khomchenko, Mironov  
*Optimal portfolio selection for an investor with asymmetric attitude to gains and losses*

##### **Room Edgar Faure**

###### **Statistical Methods**

11:00-12:15

Hamdan, Hashim, Dai  
*Statistical modelling on the severity of road accidents in United Kingdom for year 2013*

Pérez-Salamero González, Regúlez-Castillo, Vidal-Meliá  
*A procedure for selecting representative subsamples of a population from a simple random sample*

Catania  
*Dynamic adaptive mixture models with applications*

### **Room Raymond Aron**

#### **PLENARY SESSION (March 30, 2016)**

12:15-13:15

Rahbek : TBD

### **Hall 2**

#### **Lunch (March 30, 2016)**

13:15-14:15

#### **PARALLEL SESSIONS (March 30, 2016)**

##### **Room Raymond Aron**

###### **Markets**

14:15-15:30

Ballester, del Ama Aramburu, Gonzalez-Urteaga  
*The cross-border spillover effect of credit rating events on sovereign CDS: evidence on the emerging markets*

##### **Room Edgar Faure**

###### **Longevity and Mortality**

14:15-15:30

Bahl, Sabanis  
*Model-independent price bounds for the Swiss Re Mortality Bond 2003*

Bianchi, Pianese, Palazzo, Pantanella  
*Assessing market (in)efficiency*

Cerchiara, Desantis, Giuli, Magatti  
*An analysis on the premium risk for the Italian market*

Di Lorenzo, Politano, Orlando  
*The riskiness of longevity indexed life annuities in a stochastic Solvency II perspective*

Flici, Planchet  
*Construction of a dynamic life-table adapted to the Algerian retired population mortality experience*

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## Hall 2

**Coffee break (March 30, 2016)**  
15:30-15:50

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### PARALLEL SESSIONS (March 30, 2016)

#### **Room Raymond Aron** **Pricing**

15:50-17:05

Barone-Adesi, Legnazzi, Mira  
*A Bayesian estimate of the pricing kernel*

Bormetti, Callegaro, Livieri, Pallavicini  
*A backward Monte Carlo approach to exotic option pricing*

Callegaro, Fiorin, Grasselli  
*Pricing via quantization in local and stochastic volatility models*

#### **Room Edgar Faure** **Econometric Methods**

15:50-17:05

Billio, Cavicchioli  
*Markov switching GARCH models: filtering, approximations and duality*

Guégan, Hassani, Li  
*The Spectral Stress VaR (SSVaR)*

Serra, Rosales, Kribovokova  
*Empirical Bayes smoothing splines with correlated noise to study mortality rates*

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### PARALLEL SESSIONS (March 30, 2016)

#### **Room Amphi C** **Methodology**

17:05-18:45

Buckle, Chen, Hawkes  
*Flash crashes, jumps and running jumps: a new method for jump detection*

Cavezzali, Gardenal, Pizzi, Rigoni  
*The role of financial literacy and financial education in the diversification strategies*

Cingolani  
*Modelling hypotheses, policy advice and regulation: A probabilistic argument*

#### **Room Edgar Faure** **Insurance**

17:05-18:45

Di Lorenzo, Orlando, Sibillo  
*Profitability vs. attractiveness within a performance analysis of a life annuity business*

Hao, Macdonald, Tapadar, Thomas  
*Loss coverage in insurance markets: why adverse selection is not always a bad thing*

Rabitti, Rigon  
*Non-life insurance pricing through Bayesian additive regression trees*

**March 31, 2016**

**PARALLEL SESSIONS (March 31, 2016)**

**Room Raymond Aron**

**Risk**

08:40-09:55

Cisse, Diongue, Guégan  
*Statistical properties of the Seasonal FISSAR model*

Eisele, Guettouche  
*Claim provisioning with development patterns via Hachemeister's credibility*

Heynderickx, Cariboni, Schoutens, Smits  
*The relationship between risk-neutral and actual default probabilities: the credit risk premium*

**Room Edgar Faure**

**Pensions & Portfolio**

08:40-09:55

Alonso-Garcia, Devolder  
*Optimal mix between pay-as-you-go and funding in a multi-generational overlapping generations model*

Abdul Aziz, Vrontos, Hashim  
*Optimal asset allocation strategies in funded pension schemes*

Sala, Barone-Adesi  
*Conditioning the information in portfolio optimization*

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**Hall 2**

**Coffee break (March 31, 2016)**

9:55-10:15

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**PARALLEL SESSIONS (March 31, 2016)**

**Room Raymond Aron**

**Methods and models for evaluating science and technology effects**

(Organized session)

10:15-11:30

Anton, Radziievska, Isakov, Tripathy  
*Payment systems and cryptocurrency: the role of the Central Bank in its regulation, methods of mutual effect evaluation*

Basso, di Tollo  
*A generalised linear model approach to predict the result of research evaluation*

Cardin, Corazza, Funari, Giove  
*Evaluation systems: Being or not being additive?*

**Room Edgar Faure**

**Risk**

10:15-11:30

Billio, Casarin, Costola, Frattarolo  
*von Neumann entropy for financial interconnectedness and systemic risk*

Fusai, Marena, Materazzi  
*Analysis of calibration risk for exotic options through a resampling technique*

Mancini  
*Truncated Realized Covariance when prices have infinite variation jumps*

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**Room Raymond Aron**

**PLENARY SESSION (March 31, 2016)**

12:15-13:15

Spronk: Let's change finance

## Hall 2

### Lunch (March 31, 2016)

12:30-13:30

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#### PARALLEL SESSIONS (March 31, 2016)

##### **Room Raymond Aron**

###### **Risk**

13:30-14:45

Bégin, Boudreault, Doljanu, Gauthier  
*Credit and systemic risks in the financial services sector: evidence from the 2008 global crisis*

Devolder, Lebegue  
*Compositions of conditional risk measures and Solvency capital*

Ghalanos, Rossi  
*Stock market volatility and economic variables: a nonlinear approach*

##### **Room Edgar Faure**

###### **Intelligent Approaches**

13:30-14:45

Pizzi, Corazza, Parpinel  
*Evolutionary approach to combine statistical forecasting models and improve trading system*

Pelusi, Tivegna  
*Explorations in the use of artificial intelligence techniques and econometric forecasting in the €-\$ market*

Vivo, Franco  
*Fitting models to cumulative returns with a Genetic Algorithm*

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#### PARALLEL SESSIONS (March 31, 2016)

##### **Room Raymond Aron**

###### **New developments for longevity**

(Organized session)

14:45-16:00

Biessy  
*Continuous time semi-Markov inference of biometric laws associated with a Long-Term Care Insurance portfolio*

Durbán, Ayma  
*Spatial models for mortality tables: a penalized smooth approach*

Benchimol, Albarràn, Marín, Alonso-Gonzalez  
*Hierarchical Lee-Carter model estimation through data cloning applied to demographically linked populations*

##### **Room Edgar Faure**

###### **Insurance**

14:45-16:00

Antoci, Fiori Maccioni, Galeotti  
*Defensive medicine, liability insurance and malpractice litigation in an evolutionary model*

Bonollo, Di Persio, Mangini  
*Fast proxy models and applications*

Costa Cor, Boj del Val  
*Provisions for outstanding claims with distance-based generalized linear models*

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## Hall 2

### Coffee break (March 31, 2016)

16:00-16:20

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**PARALLEL SESSIONS (March 31, 2016)**

**Room Raymond Aron**  
**Retirement pension schemes and**  
**automatic adjustments**

(Organized session)

16:20-18:00

Boado-Penas, Godinez, Haberman  
*Linking pensions to life expectancy: A solution to guarantee long-term sustainability?*

Devolder  
*Automatic adjustment mechanisms in a pay-as-you-go point system*

Fornero  
*Pensions and economic-financial education*

Gannon, Legros, Touzé  
*Sustainability of pension schemes: Building a smooth automatic balance mechanism and application to the US social security*

**Room Edgar Faure**  
**Liquidity & Credit**

16:20-18:00

Bégin, Boudreault, Doljanu, Gauthier  
*Credit and systemic risks in the financial services sector: evidence from the 2008 global crisis*

Marmi, Nassigh, Regoli  
*Sovereign ratings implied by coupled CDS-bond market data*

Simion, Rigoni, Cavezzali, Veller  
*The impact of liquidity regulation announcements on the CDS market of large European banks*

**Social Dinner**  
**31<sup>th</sup> March**  
**Blue Seine Boat, Bel Ami Boat, Escale Debilly**

Metro Porte Dauphine, Direction Line n° 2 Nation

Change at Charles de Gaulle-Etoile, Direction Line n° 6 Nation

Stop at Trocadéro

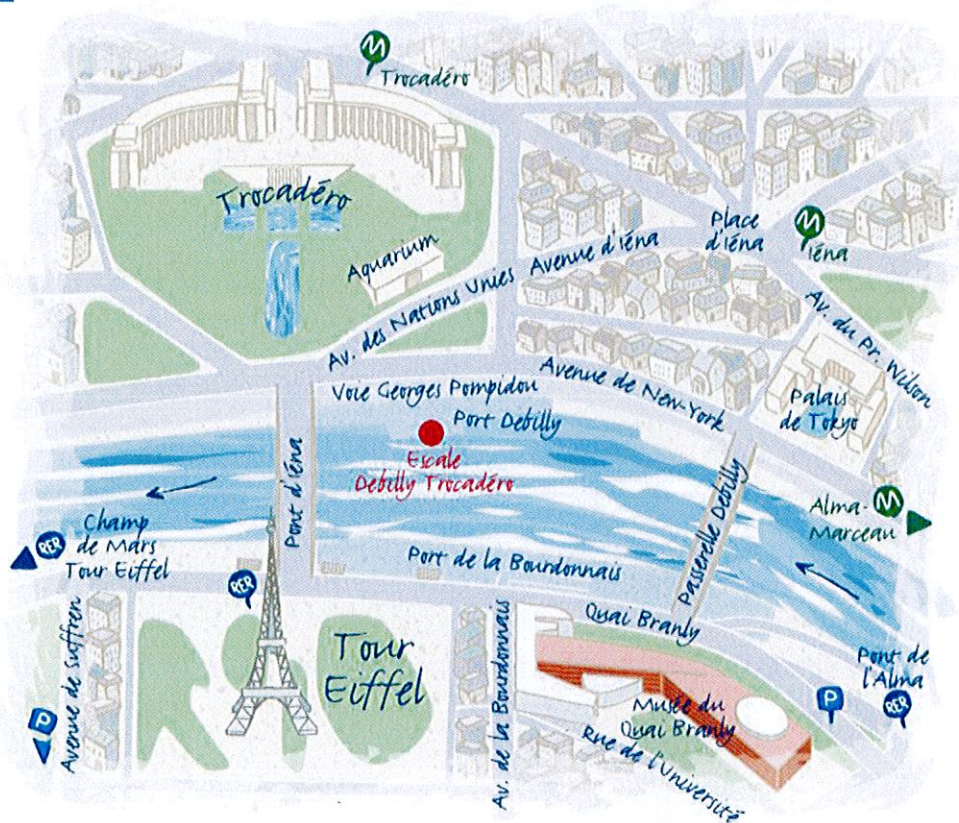
Take "Avenue du Président Wilson"

Turn on right "Avenue Albert de Mun" and go straight ahead

At the end, turn on left "Avenue de New-York" and then after 100 m, go down the stairs  
on right



# ESCALE TROCADÉRO DEBILLY



## ACCÈS

- ➔ **Bus :** Lignes 32 - 63 - station Albert de Mun  
Ligne 22 - station Trocadéro
- ➔ **Méto :** Ligne 9 - stations Trocadéro ou Iéna
- ➔ **RER :** Ligne C - station Saint-Michel / Notre-Dame  
Ligne 4 - station Saint-Michel / Notre-Dame

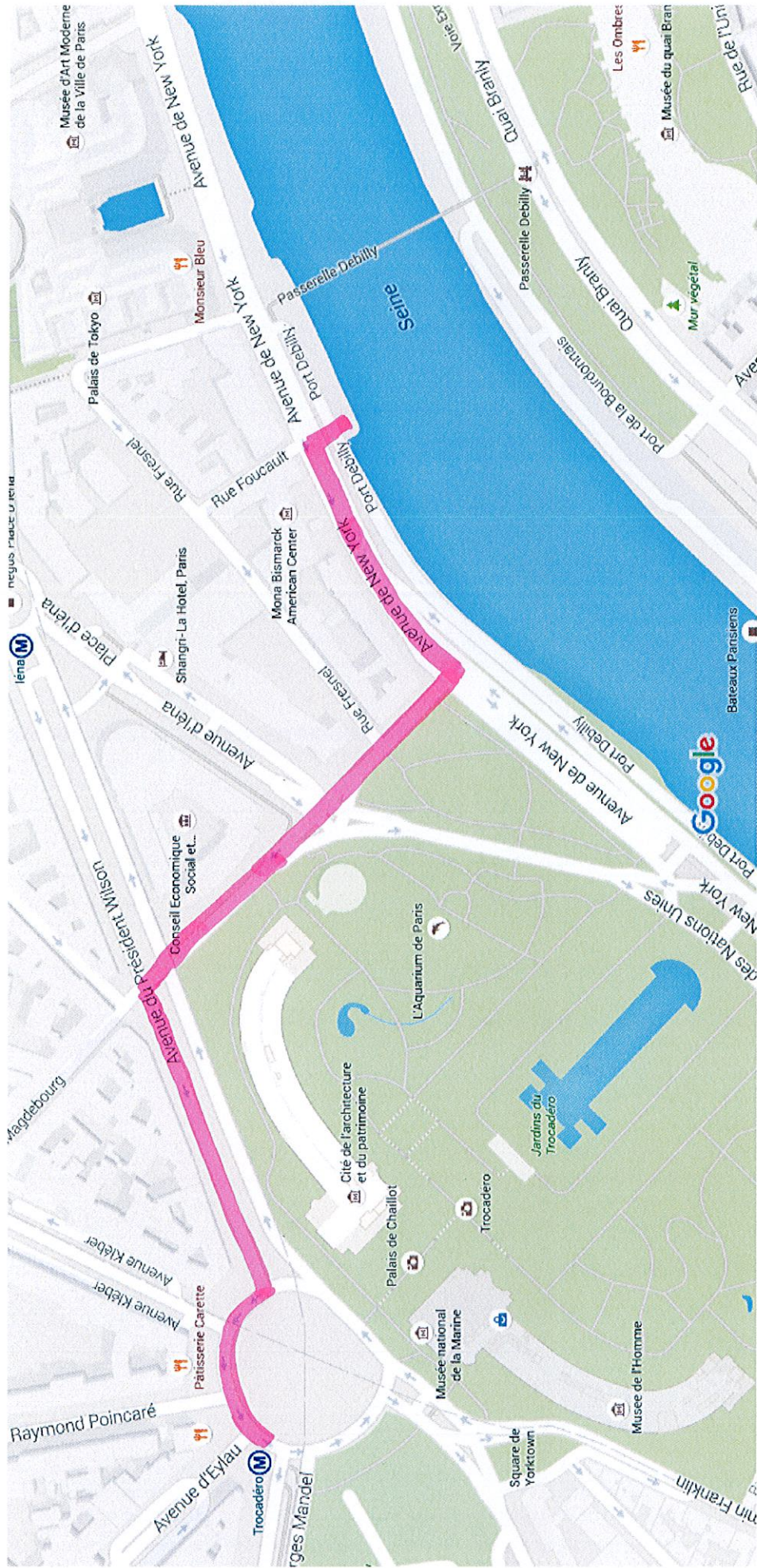
## STATIONNEMENT

- ➔ **Voitures :** Parking Trocadéro - 50, avenue du Président Wilson
- ➔ **Autocars :** Consulter : [www.prefecture-police-paris.interieur.gouv.fr](http://www.prefecture-police-paris.interieur.gouv.fr)  
[www.autocars.paris.fr](http://www.autocars.paris.fr)

Port autonome de Paris - Services des escales  
2, quai de la Tourneille - 75005 Paris  
tél. : 01 55 42 79 52 - fax : 01 44 37 73 25  
mél : [escales.apc@paris-ports.fr](mailto:escales.apc@paris-ports.fr) - web : [www.paris-ports.fr](http://www.paris-ports.fr)







**April 1, 2016**

**PARALLEL SESSIONS (April 1, 2016)**

**Room Raymond Aron**  
**Pensions**

09:00-10:15

Alonso-Garcia, Boado-Penas, Devolder  
*Economic and demographic risks for pay-as-you-go pension schemes: Defined Benefit versus Defined Contribution*

Andrews  
*Some guiding principles for the development of self-adjusting mechanisms for sustainable retirement systems*

Muller, Wagner  
*On the Adequate Funding ratio in Swiss Occupational pension funds from the insured's perspective*

**Room Edgar Faure**  
**Portfolio**

09:00-10:15

Abad, Díaz, Escribano, Robles  
*Credit rating announcements and bond liquidity*

Bonini, Caivano  
*Low default portfolios: implied rating estimation and long-run default forecasting*

Labadi, Ralf  
*Employee ownership threshold and performance: an application to French non-financial firms*

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**Hall 2**

**Coffee break (April 1, 2016)**

10:15-10:45

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**Room Raymond Aron**

**PLENARY SESSION (April 1, 2016)**

10:45-11:45

Sinz: TBD

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**PARALLEL SESSIONS (April 1, 2016)**

**Room Raymond Aron**  
**Pricing**

11:45-13:00

Horwáth, de Jong, Werker  
*Robust pricing of fixed income securities*

Karadeniz, Utev  
*Modelling share prices via the random walk on the Lamplighter group*

Nardon, Pianca  
*Cover call writing and framing: a cumulative prospect theory approach*

**Room Edgar Faure**  
**Bonds**

11:45-13:00

Colozza  
*Term structure of hedging premia and optimal trading strategies in synthetic-cash credit market*

Dang-Nguyen, Rakotondratsimba  
*Valuation, simulation and sensitivities under low and high interest rate regimes*

Diaz, Escribano  
*Liquidity measures throughout the lifetime of the US Treasury bond*



## Hall 2

### Lunch (April 1, 2016)

13:15-14:15

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#### PARALLEL SESSIONS (April 1, 2016)

##### **Room Raymond Aron** **Insurance**

14:15-15:30

D'Ortona, Melisi  
*Risks underlying Loss Portfolio Transfer*

Fersini, Melisi  
*Capital allocation for MTPL insurance in the presence of Black Box*

Levantesi, Menziatti  
*Natural hedging in Long Term Care insurance*

##### **Room Edgar Faure** **Risk**

14:15-15:30

Ballotta, Deelstra, Rayee, Quanto  
*Implied correlation in a multi-Lévy framework*

Corbetta, Peri  
*Backtesting lambda Value at Risk?*

Sousa, Esquivel, Gaspar, Corte Real  
*Bonds historical simulation Value at Risk*

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## Hall 2

### Coffee break (April 1, 2016)

15:30-16:00

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#### PARALLEL SESSIONS (April 1, 2016)

##### **Room Raymond Aron** **Risk**

16:00-17:15

Galabe, Hasim  
*Estimating Value-at-Risks (VaR) using multivariate copula-based volatility models*

Gnameho, Kannianen, Yue  
*Modelling of the volatility risk premium*

Kurtbegu  
*Replicating inter-generational risk sharing in financial markets*

##### **Room Edgar Faure** **Methodology**

16:00-17:15

Celik, Pinar  
*Robust decentralized investment games*

Le Courtois:  
*q-Credibility*

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### **CLOSING (April 1, 2016)**

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