



# The best of

# 2018

# RUE DES LUMIÈRES



# A CAMPUS FERTILE WITH TALENT



## iGEM ÉVRY: ANOTHER GOLD MEDAL!

For the second year in a row, the Évry team has landed a gold medal in the famous international synthetic biology competition, iGEM 2018, which took place at the MIT in Boston.

The team made up of fifteen or so masters and degree students worked every day for months on the “**PEPTalk**” project to show genuine enterprise promoting science, technologies, market studies and legal and societal aspects.

The team succeeded in transposing the *Escherichia coli* bacteria, a means of chemical communication recently discovered in a group of viruses, “Arbitrium”.

Totally different from the native system of the bacteria, the “Arbitrium” system uses peptides (polymers of amino acids) –hence the choice to call the project “**PEPTalk**” – not for attack purposes like among viruses, but to build this neo-communication between bacteria.

The works of the teams were moreover nominated for the prestigious prize “Best New Composite Part”.



## OUR LAW MASTER STUDENTS WINNERS OF THE PRESTIGIOUS VEDEL 2018 COMPETITION

The student team of the University of Évry won the Georges Vedel competition, which rewards the best 2 defence speeches on a priority issue of constitutionality.

This year, the 8<sup>th</sup> year of this competition, pitted 13 universities against one another, i.e. 62 registered students representing 31 masters.

## A DOCTORAL STUDENT FROM THE UNIVERSITY OF ÉVRY HONOURED!

Sébastien Grosjean, a doctoral student at the Mechanics and Energetics Laboratory of Évry, was awarded the Biot-Fourier prize from the company Française de Thermique.

Sébastien Grosjean's works, on a CIFRE contract with Thales Communication & Security, concern the modelling and simulation of the thermal behaviour of complex electronic sets.

## 2018 PRIZE LIST OF SPORTING STUDENTS

A number of students raised the profile of the establishment during the 2018 French university championships.

### Individual sports



#### ATHLETICS

- › Victoria PRATABUY DE LA LLAVE French university 800 metres vice-champion
- › Léo BONY, Nicolas BRULE, Jérémy JUSAUME, François MARIGNALE et Teddy MAUDON French university American relay sprint vice-champions
- › Orlane ARDON, Clara BEUGNON, Ivanilde LOPES CORREIA, Gloria MAKIMA, Elyzabeth MARTIAL 3<sup>rd</sup> in the women's 4x100m relay
- › Léo BONY, Nicolas BRULE, Romain HATON, et François MARIGNAL 3<sup>rd</sup> in the men's 4x100m relay

#### BOXING

- › Tahar BELKHIR 3<sup>rd</sup> in the French university championships in the -69kg category

#### ARTISTIC GYMNASTICS

- › Clara BEUGNON French vice-champion on the floor and beam, 3<sup>rd</sup> in the general competition

#### SPORTING GYMNASTICS

- › Timothy VOISIN French vice-champion in the pommels, French vice-champion in the parallel bars

#### KARATE

- › Laurine FURBATO 3<sup>rd</sup> of the French university championship



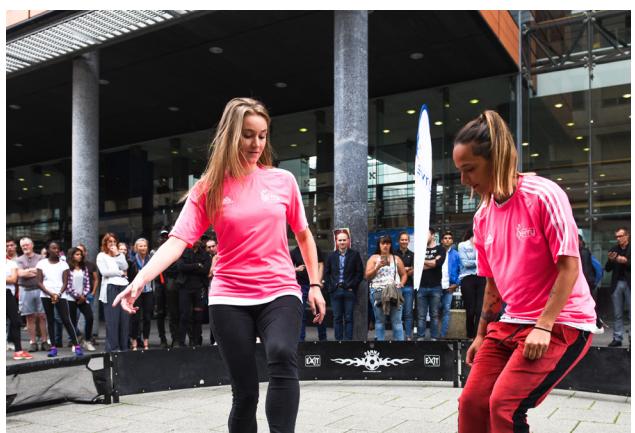
### Team sports

#### FIVE-A-SIDE FOOTBALL

- › Évry ASU French university champion: Moktar CHENNOUFI, Omar-Farouk HOUAT, Kévin KUYA, Souheil MOUHOUDINE, Justin PORTAT, Sinan SOLAK (c), Ange TSENDOU, Waël ZEHHAR
- › Souheil MOUHOUDINE elected best player of the championship
- › Justin PORTAT elected best goalkeeper of the championship

#### FUTSAL

- › The women's team of Évry ASU is crowned French university vice-champion: Romane BUJAK, Emilie GALLET, Chloé HAMON, Léna JOUAN (c), Noëlle LEROY, Katia MAGNABOSCO, Amira OULD BRAHAM, Julie PRUVOST, Camilia ZERKOUNE



## THE ÉVRY ASU ASSOCIATION REWARDED FOR THE ORGANISATION OF THE ÉVRY URBAN TRAIL, WHICH HAS BECOME A TRIAL OF THE FRENCH UNIVERSITY CHAMPIONSHIP!

The students and staff of the University of Évry were rewarded for their commitment in organising the Évry Urban Trail.

This 2018 event counted as a trial of the French university Trail championship. For her part, **Sinan SOLAK**, captain of the futsal team, received the medal of honour of the city of Paris.



## THE ÉVRY TEAM, FRENCH UNIVERSITY FIVE-A-SIDE FOOTBALL CHAMPION!

The five-a-side football team of the University of Évry has won the title of French university champion for a second time. This win crowns an impressive track record of Évry students, led by Souheil MOUHOUDINE, elected best player of the tournament.

## FAHIMA DJELIL, A TALENT FROM ÉVRY HONOURED FOR HER THESIS ON THE SUBJECT OF DIGITAL TECHNOLOGY



Graduate of the master's in Research, Virtual Reality and Intelligent Systems, **Fahima Djelil** has won the Louis D'Hainaut 2018 prize, awarded by the University agency of French-speaking countries rewarding the best thesis in educational technology.



## MANON OTT, RESEARCHER AT THE UNIVERSITY OF ÉVRY, REWARDED AT THE 22<sup>nd</sup> LES ÉCRANS DOCUMENTAIRES FESTIVAL

Film director and researcher at the Pierre Naville Centre, graduate of the Master's in Image & Society of the University of Évry, **Manon Ott** was twice awarded at the 22<sup>nd</sup> Les Écrans Documentaires festival, which rewards young film makers for their documentary work.

Her works concern working-class areas, migrations, social movements, emancipation and commitment. They take different forms – texts, photography and films – and are interested in a possible dialogue between research and film.

Prize-winner in 2006 of the Vocation Prize from the Marcel Bleustein-Blanchet Foundation (in film/photography) and in 2012, the Palladio Prize for urban research, she is also behind the group “Les yeux dans le monde” which brings together researchers, documentary film makers, sound designers, photographers and designers around the documentary approach



# A CAMPUS IN TUNE WITH OUR SOCIETY

## ACCOUNT BY PHOTOJOURNALIST EMILIE BUZYN ABOUT AFRIN, THE KURDISH ENCLAVE IN THE NORTH OF SYRIA

Photojournalist **Émilie BUZYN**, the only photojournalist to have been able to go to Afrin, Kurdish enclave in the north of Syria, came to meet the students. She documented the last days before the village fell in mid March. A poignant account that allowed the students to get a different perspective on this conflict that did not receive much media coverage and its underlying issues.

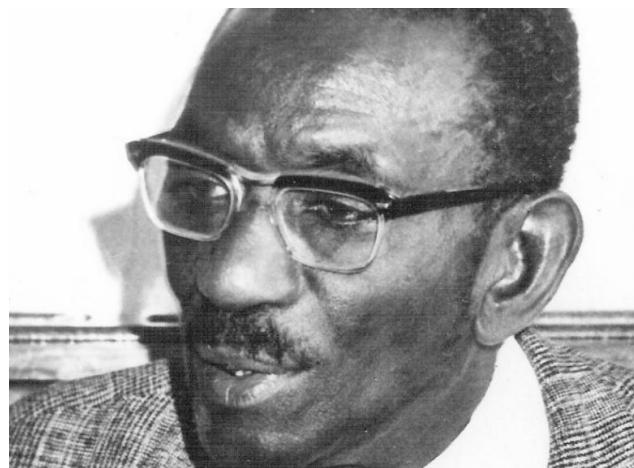


## COLLECTIVE MEMORY BREAKS FREE AT THE UNIVERSITY OF ÉVRY

The emotion was palpable on the 21st February 2018 when **Jenny Plocki** and **Diogène Ntarindwa** shared priceless fragments of their lives, blackened by their experience of the genocides.

**Jenny Plocki**, survivor of the Vel'd'Hiv raid on the 16/07/1942 (she was then 16), her family's sole survivor, told her story. **Diogène Ntarindwa** chose the theatre to give his account of the Tutsi genocide he was victim of. In the image of a whole generation, he took up arms at the age of 17.

## TRIBUTE TO CHEICK ANTA DIOP : A FIRST IN FRANCE!



For the 1<sup>st</sup> time in France, three days were devoted to the life, works and thoughts of the Senegalese scientist and historian **Cheikh Anta DIOP** (1923 - 1986) at the University of Évry.

A major intellectual figure, his works have turned a great number of common preconceptions about Africa and humanity in general upside down.

An extraordinary political man and scholar, signatory of the Athens symposium against racism and racial discrimination in 1981, launched by intellectuals from around the world under the aegis of the UNESCO, all his life **Cheikh Anta DIOP** has led a political combat for the liberation of Africa as well as its rebirth and development through the building of a Federal state capable of meeting the requirements of the modern world.

## VIRTUAL REALITY DAYS AT THE UNIVERSITY OF ÉVRY

The academic and industrial community of virtual and augmented realities and 3D interaction got together at the University of Évry in October 2018 to discuss progress and good practices of the field.



## UNIVERSITY OF ÉVRY GREATLY INVOLVED IN THE SPORT CLUSTER CREATES A DEDICATED RESEARCH LABORATORY

The Biology of Exercise for Performance and Health Laboratory (LBEPS), is a new unit in Sport Science, created down to the desire of its founding members (University of Évry, Institut de Recherches Biomédicales des Armées) to answer fundamental, applied questions.

## ÉVRY-COURCOURONNES GETS PASSIONATE AGAIN ABOUT INCANDESCENCES #2 !

La Machine company and artist Pierre de Mecquenem were back in Évry to transform the town and offer a second enthusiastic and poetic encounter in the streets of Évry-Courcouronnes!

Supported by University of Évry and labelled "Rue des Lumières" (street of lights), this second Incandescences event again combined pyrotechnical performance and artistic proposal, having fifty or so volunteers participate to deck the town centre of Évry out with fiery flames and welcome a crowd true to the date of this friendly, popular show.



## DELUGE OF RUNNERS AT THE ÉVRY URBAN TRAIL

University of Évry is proud to have been chosen to host the France University Trail Championship. The Évry Urban Trail brought together generations of runners and walkers: more than a thousand athletes were ready at the Place des Droits de l'Homme et du citoyen which was flooded with colours for the Color Run that followed! The best reward was to run in aid of the "Courir pour Marie" and "Nez à Nez des Clowns à l'hôpital" associations.

## UNIVERSITY OF ÉVRY, ESTABLISHMENT WITH THE FIRST CAMPUS FOR AERONAUTIC AND SPACE PROFESSIONS AND QUALIFICATIONS OF THE ÎLE-DE-FRANCE REGION

The result of teamwork under the aegis of the Île-de-France Region and the Local Education Authority of Versailles, this "Campus of Aeronautic and space Professions and Qualifications (CMQ): conception, production, maintenance 4.0", is certified for a four year period with University of Évry as a network leader establishment.

The partnership that is at the heart of this Campus includes conception and production to extend to maintenance. It meets the need and desire to reinforce the educational and industrial performance of the Île-de-France Region with as an objective accompanying players and companies, notably very small business and small-medium sized companies in current and future digital transformations. This digitisation is the spearhead of the 4.0 company of the future, and quick upgrading is one of the major keys to competitiveness. This will involve sharing educational platforms, technical means and jointly creating adapted training.

The appeal of the University of Évry within the CMQ is reinforced by its involvement in the Paris Region Cluster Drone (University of Évry is member of its Board of directors and Office) with the opening of two of its research laboratories, IBISC (Computer Science, Bio-Informatics and Complex Systems) and LMEE (Laboratory of Mechanics and Energetics) in the projects that roll out there, and finally by making a technological platform available that includes aeronautic means (one plane, two helicopters and a flight simulator) and machining.





# DISCOVERIES, A SOURCE OF INNOVATION



## A “RESEARCH” PRIZE FOR ADVANCES IN CELLULAR THERAPY FOR RETINOPATHIES

The team of Christelle MONVILLE (lecturer at the University of Évry), was awarded the Prize from the «La Recherche 2019» magazine in the health section for its work on retinopathies.

I-Stem researchers (UMR 861 - Institute of Stem Cells for the treatment and study of monogenetic diseases) succeeded, together with the team led by Olivier GOUREAU, Inserm director of research within the Institute of Vision, in improving the vision of rats afflicted with retinosis pigmentosa thanks to the transplant of a cellular dressing obtained from human embryonic stem cells.

Carried out notably thanks to Telethon donations, these works open the way to cell therapy of retinosis pigmentosa of genetic origin but also very frequent degenerative diseases of the retina like certain forms of Age-related Macular Degeneration (ARMD).



## VIRTUAL AND AUGMENTED REALITY IN HEALTH

Virtual and augmented reality dedicated to patients and health: two theses are underway to improve the observance of treatment protocols and provide a practical and playful response to patients.

**One concerns the rehabilitation of post-stroke patients thanks to virtual reality (CIFRE with the company Interaction Healthcare).**

For Ludovic David, doctoral engineer from the University of Évry it involves «designing and making an interactive auto-rehabilitation

## THE SEQUENCING OF THE GENOME OF WHEAT HAS BEEN ACHIEVED TODAY

French teams including researchers from the University of Évry have contributed to this genuine scientific exploit owing to the size and complexity of this genome, five times bigger than the human genome and 40 times bigger than that of rice. This result will notably allow genes of agricultural interest to be identified, thus opening up new prospects to improve wheat varieties and its farming, faced with the planetary challenges to take up. It is also a major step on a fundamental level, to understand the functioning and evolution of this complex genome.

## AN INNOVATIVE APPROACH: MONITORING AND ASSESSING MUTATIONS IN INDIVIDUAL CELLS

Rare, accidental or provoked, mutations are a driving force behind evolution and have an important impact on human health. An innovative approach developed at the University of Évry allows the dynamics of the appearance of spontaneous mutations to be characterised and the effects of these to be quantified. Publication in Science.

system of the upper limb. Elements from video games, movement assistance tools and readings are integrated and assessed. A design method centred around users will be monitored within a multidisciplinary team.»

**The other uses augmented reality dedicated to rehabilitating children suffering from cerebral palsy (CIFRE with the Ellen Poidatz foundation).**

Anne-Laure Guinet, physiotherapist since 2012, works in paediatrics and more specifically neurological rehabilitation. She decided to develop a playful and interactive system to keep motivating children throughout the rehabilitation period. After a clinical intervention, “the rehabilitation of walking will be different for each child, depending on the level of handicap and pathology”.

The advantages are two-fold, the children remain fond of new technologies and are easily won over and the programme can be adjusted depending on the child’s age, handicap and progress made.

These two theses are underway within the University of Évry and should lead to revolutionary treatment protocols for the rehabilitation of the upper and lower limbs.



# INTERNATIONAL

## LOCA3D: ANR (national research agency) project co-financed by the DGA

The LOCA-3D Project (Location, Orientation and 3D Mapping) supported by the IBISC laboratory in partnership with the company INNODURA and the TITANE team from INRIA aims to compensate for the lack of knowledge regarding the technical and technological aspects of indoor location. The solution put forward by the team is based on the combination of several sensors (notably inertial and optical).

## ANR JCJC SVeDaS Project

The SVeDaS project aims at advancing the latest developments in the modelling, analysis and deployment of data-aware systems by using a new compositional agent-based approach in their specification and verification.

The results of the SVeDaS project will allow the construction of more trustworthy and reliable systems.



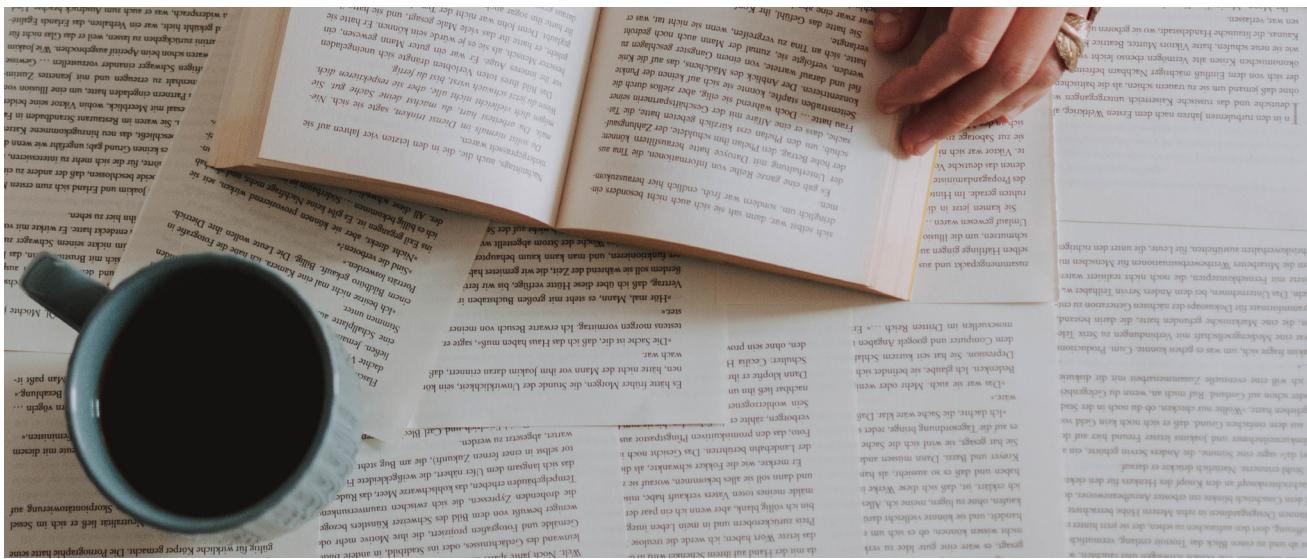
## ELAINE MARDIS, DOCTOR HONORIS CAUSA OF THE UNIVERSITY OF ÉVRY

Elaine Mardis, Professor at the National Children's Hospital in Columbus, Ohio, specialist of the specialised medicine of cancer, enlightened about the complete sequencing of genomes. In the presence of Jean-Marc Grognet, Director of Genopole, and Francis Quétier, Professor emeritus, Patrick Curmi awarded her the title of Doctor Honoris Causa of the University of Evry.





# NOTEWORTHY WORKS 2018



- **A. Hammoudi ; N. Daidj**, Game Theory Approach to Managerial Strategies and Value Creation, Wiley-ISTE, 2018, ISBN : 978-1-84821-973-1, 184 pages.
- **F. Le Bot ; O. Dard ; C. Didry ; C. Dupuy et C. Perrin (dir.)**, dossier « L'Homme Machine II. Du travailleur augmenté à l'homme augmenté », L'Homme et la société, 208, 2018/2
- **T. Roncalli**, Handbook of Risk Management, Lecture Notes, M2 GRA, à paraître dans CRC Financial Mathematics Series, Chapman-Hall, 1000 pages, (2018)
- **J-P. Durand**, La Sociologie de Marx, La Découverte, « Repères » (nouvelle édition mise à jour), 2018, 128 pages.
- **J-P. Durand**, Creating the New Worker : Work, Consumption and Subordination, Basingstoke (UK), Palgrave, 2018.
- **R. Vallée ; C. Renouard**, Les effets spéciaux au cinéma. 120 ans de créations en France et dans le monde, Armand Colin, 2018, 296 pages.
- « L'UNIVERSITE ET LA VILLE » <https://www.univ-evry.fr/toute-lactualite/actualites-universite/sortie-du-livre-luniversite-et-la-ville.html?q=unesco&backId=284&chash=b3dd93d44f0d-08be3e8241ebfd53b0a0>
- **B. Gauthier**, Personne ne le saura, Paris, Folio, 2018
- **M. Guérin**, Formes et figures de la critique musicale au XXe siècle, ouvrage collectif coédité avec Timothée Picard, Rennes, Presses Universitaires de Rennes, 2018.
- **S. Roques**, « Entre jeu du dehors et jeu du dedans : la mise en scène des limites », Corps bément, corps morcelé dans les arts scéniques et visuels, Louvain La Neuve, Editions Modulaires Européennes, collection « Arts, rites et théâtralité », Ouvrage collectif dirigé par Marie Garré Nicoara et Julie Postel (Université d'Artois, EA 4028 Textes et Cultures), 2018, 10 p, (2018)
- **J. Breschand ; F. Prodromidès**, La papesse Jeanne, Editeur l'Harmattan
- **S. Bros (dir.)**, Les innovations de la réforme du droit des contrats, Editeur Institut Universitaire Varenne
- **O. Bui-Xuan (dir.)**, La radicalisation religieuse saisie par le droit, Editeur Institut Universitaire Varenne

- **V. Bouhier (dir.) ; D. Ricardi (dir.)**, L'exécution des contrats administratifs, Editions Le Moniteur
- **W. Ben Hamida (dir.) ; S. Bostanji (dir.)**, La médiation dans tous ses états, Éditions A. Pedone
- **G. Marin ; N. Leclerc**, 30 minutes d'histoire par jour : à Sciences po Paris-IEP, Editeur Ellipses
- **Pascale Mormiche**, Le petit Louis XV : enfance d'un prince, genèse d'un roi (1704-1725), Editeur Champ Vallon
- **V. Bada ; C. Letawe ; C. Pagnoulle ; P. Wilson (dir.)**, Impliciter, expliciter : l'intervention du traducteur, Editeur Presses universitaires de Liège
- **D. Paul Chevallier ; J. Lerbet**, Multi-body kinematics and dynamics with Lie groups, Editeur ISTE Press Ltd.
- **J-P. Durand**, La sociologie de Marx (édition à jour et augmentée), Editeur La Découverte
- **J. Sebag ; J-P. Durand ; C. Louveau ; L. Queirolo Palmas ; L. Stagi**, Sociologie visuelle et filmique : Le point de vue dans la vie quotidienne, Editeur Genova University Press
- **V. Billat**, Révolution marathon, Editeur De Boeck Supérieur
- **A. Hammoudi ; N. Daidj**, Stratégies managériales et création de valeur : une approche par la théorie des jeux, ISTE éditions
- **K. Sing ; R. Spezia**, Theoretical mass spectrometry : tracing ions with classical trajectories, Editeur De Gruyter
- **C. Belmonte Grey ; N. Berthier ; A. del Rey Reguillo (dir.)**, Cine y audiovisual : trayectos de ida y vuelta, Editeur Universidad de Valencia
- **C. Larroumet ; S. Bros**, Les obligations : le contrat (nouvelle édition), Editeur Economica
- **D. Houtcierff**, Droit des contrats (nouvelle édition), Editeur Bruylant
- **V. Anger ; E. Kippelen, Jean-Louis Florentz**, veilleur insoumis, Editeur Les Amis de la musique française



# NOTEWORTHY PUBLICATIONS 2018

## → LIFE SCIENCES

- UNE PUBLICATION SCIENTIFIQUE DE L'ÉQUIPE I-STEM OBTIENT LE PRIX « LA RECHERCHE 2019 » <https://stm.sciencemag.org/content/9/421/eaai7471> Human ESC-derived retinal epithelial cell sheets potentiate rescue of photoreceptor cell loss in rats with retinal degeneration
- S. Bougueroua ; R. Spezia ; S. Pezzotti ; D. Barth ; M.-P. Gaigeot, Graph theory for automatic structural recognition in molecular dynamics simulations Phys. 149, 184102 (2018)
- Publication dans la revue Angewandte Chemie d'une nouvelle réaction d'aldolisation ouvrant la voie à la biosynthèse de toute une série de « keto-polyol » phosphorylés. Angew.Chem.2018,130,5565–5569. Dépôt de brevet associé
- Publication dans la revue ACS Synth Biol de l'implémentation d'une voie permettant l'assimilation du CO<sub>2</sub> au travers de C1 réduit chez Escherichia coli. ACS Synth. Biol. (2018) 7, 2029-2036 doi : 10.1021/acssynbio.8b00167
- MP. Gaigeot, Influence of argon and D-2 tagging on the hydrogen bond network in Cs+(H<sub>2</sub>O) (3) ; kinetic trapping below 40 K
- J-P. Karr, Stark quenching of rovibrational states of H-2(+) due to motion in a magnetic field
- F. Kepes, Multiple links connect central carbon metabolism to DNA replication initiation and elongation in *Bacillus subtilis*
- M. Dalmais, Unleashing meiotic crossovers in crops
- M. Crespi, Whole-genome landscape of *Medicago truncatula* symbiotic genes
- L. Le Moyec, Nuclear magnetic resonance metabolic fingerprint of bevacizumab in mutant IDH1 glioma cells
- H. Cheradame, Consolidation of degraded polyurethane foams by means of polysiloxane mixtures : Polycondensation study and application treatment
- F. Wincker, Worldwide Occurrence and Activity of the Reef-Building Coral Symbiont *Symbiodinium* in the Open Ocean
- Z. Eskandani ; C. Huin, Polynucleotide transport through lipid membrane in the presence of starburst cyclodextrin-based poly(ethylene glycol)s
- A. Zaparucha, Structural Studies based on two Lysine Dioxygenases with Distinct Regioselectivity Brings Insights Into Enzyme Specificity within the Clavaminate Synthase-Like Family
- B. Cressiot, Thermostable virus portal proteins as reprogrammable adapters for solid-state nanopore sensors
- P. Wincker, De novo assembly and annotation of three Leptosphaeria genomes using Oxford Nanopore MinION sequencing
- MA. Debily, Transcriptomic and epigenetic profiling of “diffuse midline gliomas, H3 K27M-mutant” discriminate two subgroups based on the type of histone H3 mutated and not supratentorial or infratentorial location
- P. Monceau ; S. Bottani, Neuronal devices : understanding neuronal cultures through percolation helps prepare for the next step
- P. Wincker, Chromosome-scale assemblies of plant genomes using nanopore long reads and optical maps
- G. Rigail, Allele-specific expression and genetic determinants of transcriptomic variations in response to mild water deficit in tomato
- C. Campillo, Interplay between membrane tension and the actin cytoskeleton determines shape changes
- S. Fisson, Dosage Thresholds and Influence of Transgene Cassette in Adeno-Associated Virus-Related Toxicity
- A. Fennouri ; J. Ramiandrisoa ; L. Bacri ; J. Mathe ; R. Daniel, Comparative biosensing of glycosaminoglycan hyaluronic acid oligo- and polysaccharides using aerolysin and -hemolysin nanotubes (ai dagger)
- A. Bouhss, Synthesis of Lipid-Carbohydrate-Peptidyl-RNA Conjugates to Explore the Limits Imposed by the Substrate Specificity of Cell Wall Enzymes on the Acquisition of Drug Resistance
- P. Wincker, Comparative Time-Scale Gene Expression Analysis Highlights the Infection Processes of Two *Amoeboaphrya* Strains
- L. Bacri ; H. Mamad-Hemouch ; N. Jarroux ; J. Pelta, Biomimetic ion channels formation by emulsion based on chemically modified cyclodextrin nanotubes
- J. Bigeard, The Trihelix transcription factor GT2-like 1 (GTL1) promotes salicylic acid metabolism, and regulates bacterial-triggered immunity
- J. Roman ; N. Jarroux ; G. Patriarche ; J. Pelta ; L. Bacri, Solid-State Nanopore Easy Chip Integration in a Cheap and Reusable Microfluidic Device for Ion Transport and Polymer Conformation Sensing
- MP. Gaigeot, Spectroscopic BIL-SFG Invariance Hides the Chaotropic Effect of Protons at the Air-Water Interface
- A. Jaramillo, Boolean Computation in Plants Using Post-translational Genetic Control and a Visual Output Signal
- N. Dominguez, Distinct patterns of exocytosis elicited by Ca<sup>2+</sup>, Sr<sup>2+</sup> and Ba<sup>2+</sup> in bovine chromaffin cells
- G. Lamour, Mechanical Anisotropy in GNNQQNY Amyloid Crystals
- J. Roman ; J. Pelta ; L. Bacri, From current trace to the understanding of confined media
- A. Bouhss, FtsW activity and lipid II synthesis are required for recruitment of MurJ to midcell during cell division in *Escherichia coli*
- V. Joshi ; PA. Curmi, Functional differences of short and long isoforms of spastin harboring missense mutation
- C. Medigue ; S. Cruveiller ; D. Roche, Extended-spectrum beta-lactamase-encoding genes are spreading on a wide range of *Escherichia coli* plasmids existing prior to the use of third-generation cephalosporins
- G. Royer ; M. Dubois ; D. Vallenet ; C. Medigue, PlaScope : a targeted approach to assess the plasmidome from genome assemblies at the species level
- L. Platon ; F. Zehraoui ; F. Tahiri, IRSOM, a reliable identifier of ncRNAs based on supervised self-organizing maps with rejection
- S. Pateyron, Low doses of triazine xenobiotics mobilize ABA and cytokinin regulations in a stress- and low-energy-dependent manner
- I. Grigoras, Nanovirus DNA-N encodes a protein mandatory for aphid transmission
- H. Mamad-Hemouch ; L. Bacri ; C. Huin ; N. Jarroux ; J. Pelta, Versatile cyclodextrin nanotube synthesis with functional anchors for efficient ion channel formation : design, characterization and ion conductance
- V. Pezo ; P. Marliere ; F. Jaziri, Methylated Nucleobases : Synthesis and Evaluation for Base Pairing In Vitro and In Vivo
- M. Crespi, Nuclear Speckle RNA Binding Proteins Remodel Alternative Splicing and the Non-coding *Arabidopsis* Transcriptome to Regulate a Cross-Talk Between Auxin and Immune Responses
- V. Macaluso ; R. Spezia, Threshold for shattering fragmentation in collision-induced dissociation of the doubly protonated tripeptide TIK(H<sup>+</sup>)(2)

---

## NOTEWORTHY PUBLICATIONS 2018

---

- **A. Pensel ; S. Peulon**, In situ XANES measurements during electrodeposition of thin film : Example of birnessite, a promising material for environmental applications
- **S. Bougueroua ; DR. Galimberti ; MP. Gaigeot ; S. Pezzotti**, Combining ab-initio and classical molecular dynamics simulations to unravel the structure of the 2D-HB-network at the air-water interface
- **S. Huguet ; S. Balzergue**, One Way to Achieve Germination : Common Molecular Mechanism Induced by Ethylene and After-Ripening in Sunflower Seeds
- **V. Geffroy ; S. Pflieger**, White seed color in common bean (*Phaseolus vulgaris*) results from convergent evolution in the P (pigment) gene
- **P. Wincker ; K. Labadie ; C. Cruaud ; S. Engelen**, The Rise and Fall of African Rice Cultivation Revealed by Analysis of 246 New Genomes
- **D. Vallenet ; S. Cruveiller ; C. Login**, Transcriptome Profiles of Nod Factor-independent Symbiosis in the Tropical Legume *Aeschynomene evenia*
- **A. Savy**, Genetics instability of wtAAV2 genome and AAV promoter activities in the Baculovirus/Sf9 cells system
- **S. Pezzotti ; DR. Galimberti ; YR. Shen ; MP. Gaigeot**, What the Diffuse Layer (DL) Reveals in Non-Linear SFG Spectroscopy
- **A. Jaramillo**, Modulation of Intracellular O<sub>2</sub> Concentration in Escherichia coli Strains Using Oxygen Consuming Devices
- **MA. Debily**, Cerebral blood flow changes after radiation therapy identifies pseudoprogression in diffuse intrinsic pontine gliomas
- **C. Vergne-Vaxelaire ; A. Mariage ; J-L. Petit ; A. Fossey-Jouenne ; E. Darii ; A. Debard ; S. Nepert ; V. Pellouin ; A. Zaparucha ; M. Salanoubat ; V. de Berardinis**, Characterization of a thermotolerant ROK-type mannofructokinase from *Streptococcus mitis* : application to the synthesis of phosphorylated sugars
- **B. Chalhoub**, Homoeologous exchange is a major cause of gene presence/absence variation in the amphidiploid *Brassica napus*
- **MP. Gaigeot ; MF. Politis**, Proton Collision on Deoxyribose Originating from Doubly Ionized Water Molecule Dissociation
- **P. Herdewijn**, XNA ligation using T4 DNA ligase in crowding conditions
- **C. Huin ; JY. Salpin ; S. Poyer**, Topology and Electronic Density Driven Generation of Alkali Cation Complexes
- **S. Cruveiller**, Parallels between experimental and natural evolution of legume symbionts
- **P. Wincker ; E. Pelletier**, A de novo approach to disentangle partner identity and function in holobiont systems
- **P. Wincker ; J. Poulaïn**, Gene flow contributes to diversification of the major fungal pathogen *Candida albicans*
- **R. Daniel**, Lasers and ion mobility : new additions to the glycosaminoglycanomics toolkit
- **A. Maucuer ; B. Desforges ; V. Joshi ; M. Boca ; D. Kretov ; L. Hamon ; A. Bouhss ; PA. Curmi ; D. Pastre**, Microtubules as platforms for probing liquid-liquid phase separation in cells - application to RNA-binding proteins
- **JY. Salpin ; V. Haldys ; E. Leon**, Protonation of methyluracils in the gas phase : The particular case of 3-methyluracil
- **JY. Salpin ; V. Haldys**, Structures of [M(Ura-H) (Ura)r and [M(Ura-H) (H<sub>2</sub>O)r] (M = Cu, Zn, Pb; n=1-3) complexes in the gas phase by IRMPD spectroscopy in the fingerprint region and theoretical studies
- **P. Herdewijn ; V. Pezo**, Metabolic Recruitment and Directed Evolution of Nucleoside Triphosphate Uptake in *Escherichia coli*
- **P. Wincker ; K. Labadie**, The Rosa genome provides new insights into the domestication of modern roses
- **E. Petit-Teixeira**, Association of the HLA-B27 antigen and the CTLA4 gene CT60/rs3087243 polymorphism with ankylosing spondylitis in Algerian population : A case-control study
- **P. Monceau**, Effects of inhibitory neurons on the quorum percolation model and dynamical extension with the Brette-Gerstner model
- **P. Wincker ; J. Poulaïn**, An improved primer set and amplification protocol with increased specificity and sensitivity targeting the *Symbiodinium* ITS2 region
- **Z. Rouy ; S. Cruveiller ; C. Medigue**, Expansion of the SOS regulon of *Vibrio cholerae* through extensive transcriptome analysis and experimental validation
- **ML. Schlegel**, Corrosion at the carbon steel-clay borehole water interface under anoxic alkaline and fluctuating temperature conditions
- **K. Sugier ; P. Wincker**, Chitin distribution in the *Oithona* digestive and reproductive systems revealed by fluorescence microscopy
- **L. Bacri ; J. Pelta**, Dynamics of a polyelectrolyte through aerolysin channel as a function of applied voltage and concentration
- **L. Janniere**, Division-Based, Growth Rate Diversity in Bacteria
- **N. Perchat ; PL. Saïdi ; E. Darii ; C. Pelle ; JL. Petit ; M. Besnard-Gonnet ; V. de Berardinis ; M. Dupont ; A. Gimbert ; M. Salanoubat ; C. Fischer ; A. Perret**, Elucidation of the trigonelline degradation pathway reveals previously undescribed enzymes and metabolites
- **S. Pezzotti ; MP. Gaigeot**, 2D-HB-Network at the air-water interface : A structural and dynamical characterization by means of ab initio and classical molecular dynamics simulations
- **A. Mariage ; JL. Petit ; M. Salanoubat ; V. de Berardinis ; E. Darii**, Synthesis of Branched-Chain Sugars with a DHAP-Dependent Aldolase : Ketones are Electrophile Substrates of Rhamnulose-1-phosphate Aldolases
- **J. Bigeard ; H. Hirt**, The *Arabidopsis* homolog of human G3BP1 is a key regulator of stomatal and apoplastic immunity
- **M. Benhamed ; C. Raynaud**, The YTH Domain Protein ECT2 Is an m(6)A Reader Required for Normal Trichome Branching in *Arabidopsis* ([OPEN])
- **A. Annamale ; A. Alberti ; C. Da Silva ; P. Wincker**, Analysis of the genomic basis of functional diversity in dinoflagellates using a transcriptome-based sequence similarity network
- **A. Jaramillo**, Quantitative Characterization of Translational Riboregulators Using an in Vitro Transcription Translation System
- **E. Pelletier**, Endocytosis-mediated siderophore uptake as a strategy for Fe acquisition in diatoms
- **P. Wincker**, Genome evolution across 1,011 *Saccharomyces cerevisiae* isolates
- **P. Wincker**, Genomics analysis of *Aphanomyces* spp. Identifies a new class of oomycete effector associated with host adaptation
- **C. Medigue ; D. Vallenet**, GROOLS : reactive graph reasoning for genome annotation through biological processes
- **P. Herdewijn**, Modulation of BACE1 Activity by Chemically Modified Aptamers
- **P. Wincker**, Status of coral reefs of Upolu (Independent State of Samoa) in the South West Pacific and recommendations to promote resilience and recovery of coastal ecosystems
- **L. Le Moyec**, NMR metabolomic signatures reveal predictive plasma metabolites associated with long-term risk of developing breast cancer
- **M. Elez**, Mutation dynamics and fitness effects followed in single cells
- **R. Spezia**, Unimolecular Fragmentation of Deprotonated Diproline [Pro(z)-H]<sup>-</sup> Studied by Chemical Dynamics Simulations and IRMPD Spectroscopy

---

## NOTEWORTHY PUBLICATIONS 2018

---

- **S. Fisson**, Subretinal Injection of HY Peptides Induces Systemic Antigen-Specific Inhibition of Effector CD4(+) and CD8(+) T-Cell responses
- **P. Wincker**, Convergent genomic signatures of domestication in sheep and goats
- **J. Pelta**, Identification of single amino acid differences in uniformly charged homopolymeric peptides with aerolysin nanopore
- **H. Hirt**, Ethylene induced plant stress tolerance by Enterobacter sp SA187 is mediated by 2-keto-4-methylthiobutyric acid production
- **M. Benhamed ; E. Petit-Teixeira**, Measurement of absolute copy number variation of Glutathione S-Transferase M1 gene by digital droplet PCR and association analysis in Tunisian Rheumatoid Arthritis population
- **R. Spezia ; MP. Gaigeot**, Roles of Hydration for Inducing Decomposition of 2-Deoxy-D-ribose by Ionization of Oxygen K-Shell Electrons
- **S. Pezzotti ; DR. Galimberti ; YR. Shen ; MP. Gaigeot**, Structural definition of the BIL and DL : a new universal methodology to rationalize non-linear chi((2)) (omega) SFG signals at charged interfaces, including chi((3))(omega) contributions
- **R. Spezia**, The formation of urea in space I. Ion-molecule, neutral-neutral, and radical gas-phase reactions
- **C. Medigue**, Vibrio tapetis Displays an Original Type IV Secretion System in Strains Pathogenic for Bivalve Molluscs
- **R. Spezia**, Chemical dynamics simulations of CID of peptide ions : comparisons between TIK(H+)(2) and TLK(H+)(2) fragmentation dynamics, and with thermal simulations
- **P. Monceau ; S. Bottani**, Understanding the Generation of Network Bursts by Adaptive Oscillatory Neurons
- **K. Labadie ; C. Cruaud ; M. Salanoubat**, Complete Genome Sequence of the Facultative Methylotroph Methylobacterium extorquens TK 0001 Isolated from Soil in Poland
- **A. Fossey-Jouenne ; C. Vergne-Vaxelaire ; A. Zaparucha**, Enzymatic Cascade Reactions for the Synthesis of Chiral Amino Alcohols from L-lysine
- **V. Joshi ; PA. Curmi**, Multiplex epithelium dysfunction due to CLDN10 mutation : the HELIX syndrome
- **A. Mirkovic**, The opening of medically assisted procreation (MPA)
- **J. Poulaïn**, Neobodonids are dominant kinetoplastids in the global ocean
- **JY. Salpin ; V. Haldys**, Interactions of Dimethyltin(IV) with Uracil As Studied in the Gas Phase
- **JP. Karr ; L. Hilico**, Proton-electron mass ratio from HD+ revisited
- **R. Spezia**, Gas Phase Synthesis of Protonated Glycine by Chemical Dynamics Simulations
- **P. Wincker ; E. Pelletier ; C. Da Silva ; A. Alberti ; K. Labadie ; S. Engelen ; J. Poulaïn**, A global ocean atlas of eukaryotic genes
- **P. Wincker ; E. Pelletier ; J. Poulaïn ; K. Labadie ; M. Salanoubat**, Single-cell genomics of multiple uncultured stramenopiles reveals underestimated functional diversity across oceans
- **F. Tahí** ; Bi-objective integer programming for RNA secondary structure prediction with pseudoknots
- **H. Hirt**, Plant Immunity : The MTI-ETI Model and Beyond
- **M. Crespi**, Stable Inactivation of MicroRNAs in *Medicago truncatula* Roots
- **M. Crespi**, Root Development in *Medicago truncatula* : Lessons from Genetics to Functional Genomics
- **G. Rigail**, Bioinformatic Analysis of Chloroplast Gene Expression and RNA Posttranscriptional Maturations Using RNA Sequencing
- **R. Spezia**, Degradation of LiTFO/TEGME and LiTFO/DME Electrolytes in Li-O<sub>2</sub> Batteries
- **D. Vallenet ; C. Medigue ; G. Royer**, The Odyssey of the Ancestral Escherich Strain through Culture Collections : an Example of Allopatric Diversification
- **S. Balzergue ; G. Rigail**, Homoeologous exchanges cause extensive dosage-dependent gene expression changes in an allopolyploid crop
- **M. Benhamed ; C. Raynaud**, At-MINI ZINC FINGER2 and SI-INHIBITOR OF MERISTEM ACTIVITY, a Conserved Missing Link in the Regulation of Floral Meristem Termination in *Arabidopsis* and Tomato
- **S. Balzergue ; G. Rigail**, Synthetic data sets for the identification of key ingredients for RNA-seq differential analysis
- **J. Bigeard ; H. Hirt**, Quantitative Phosphoproteomic Analysis Reveals Shared and Specific Targets of *Arabidopsis* Mitogen-Activated Protein Kinases (MAPKs) MPK3, MPK4, and MPK6
- **D. Vallenet ; C. Medigue**, *Bacillus subtilis*, the model Gram-positive bacterium: 20years of annotation refinement
- **S. Balzergue**, Characterization of non-target-site mechanisms in imidazolinone-resistant sunflower by RNA-seq
- **E. Pelletier**, The Ocean Gene Atlas : Exploring the biogeography of plankton genes online
- **G. Rigail**, LRP5 regulates the expression of STK40, a new potential target in triple-negative breast cancers
- **J. Poulaïn ; P. Wincker**, Pezizomycetes genomes reveal the molecular basis of ectomycorrhizal truffle lifestyle
- **J. Pelta**, Processes at nanopores and bio-nanointerfaces : general discussion
- **P. Wincker**, Discovering Millions of Plankton Genomic Markers from the Atlantic Ocean and the Mediterranean Sea
- **E. Petit-Teixeira**, Computational Systems Biology Approach for the Study of Rheumatoid Arthritis : From a Molecular Map to a Dynamical Model
- **D. Vallenet**, Evolutionary Evidence of Algal Polysaccharide Degradation Acquisition by *Pseudoalteromonas carrageenovora* 9T to Adapt to Macroalgal Niches
- **P. Herrewijn**, Incorporation of a minimal nucleotide into DNA
- **F. Gonnet**, Characterization of Renal Injury and Inflammation in an Experimental Model of Intravascular Hemolysis
- **L. Le Moyec**, Determination of candidate metabolite biomarkers associated with recurrence of HCV-related hepatocellular carcinoma
- **A. Chausse**, Electrochemical treatment coupled to electrodeposited birnessite thin films applied to the degradation of emerging pollutants
- **MA. Debily**, Diffuse intrinsic pontine gliomas (DIPG) at recurrence : is there a window to test new therapies in some patients ?
- **S. Balzergue ; V. Geffroy**, Genomic and epigenomic immunity in common bean: the unusual features of NB-LRR gene family
- **PL. Saaidi**, Distinct Carbon Isotope Fractionation Signatures during Biotic and Abiotic Reductive Transformation of Chlordecone
- **S. Balzergue**, Combining laser-assisted microdissection (LAM) and RNA-seq allows to perform a comprehensive transcriptomic analysis of epidermal cells of *Arabidopsis* embryo
- **S. Cruveiller**, The genomic and transcriptomic basis of the potential of *Lactobacillus plantarum* A6 to improve the nutritional quality of a cereal based fermented food
- **N. Daniele ; C. Moal ; L. Julien ; M. Marinello ; T. Jamet ; A. Buj-Bello**, JOURNAL OF NEUROPATHOLOGY AND EXPERIMENTAL NEUROLOGY
- **B. Delépine ; JL. Faulon**, A dataset of small molecules triggering transcriptional and translational cellular responses
- **C. Przybylski**, Revealing cooperative binding of polycationic cyclodextrins

with DNA oligomers by capillary electrophoresis coupled to mass spectrometry

- **P. Vidal ; P. Colella ; HC. Verdera ; L. Jauze ; F. Puzzo ; F. Collaud ; MS. Sola ; S. Charles ; I. Richard ; G. Ronzitti ; F. Mingozzi**, Rescue of GSDIII Phenotype with Gene Transfer Requires Liver- and Muscle-Targeted GDE Expression
- **W. Majeran**, Targeted Profiling of *Arabidopsis thaliana* Subproteomes Illuminates Co- and Posttranslationally N-Terminal Myristoylated Proteins
- **L. Soubigou-Taconnat**, Guanosine tetraphosphate modulates salicylic acid signalling and the resistance of *Arabidopsis thaliana* to Turnip mosaic virus
- **F. Jacob**, A dominant-interfering *camta3* mutation compromises primary transcriptional outputs mediated by both cell surface and intracellular immune receptors in *Arabidopsis thaliana*
- **C. Thomas**, Combination of nutritional polyphenols supplementation with exercise training counteracts insulin resistance and improves endurance in high-fat diet-induced obese rats
- **S. Kanj ; T. Bruls**, Shared Nearest Neighbor Clustering in a Locality Sensitive Hashing Framework
- **C. Laffont ; F. Frugier**, MtNRLK1, a CLAVATA1-like leucine-rich repeat receptor-like kinase upregulated during nodulation in *Medicago truncatula*
- **S. Henriques ; C. Patissier ; N. Bourg ; J. Marsolier ; I. Richard**, Different outcome of sarcoglycan missense mutation between human and mouse
- **A. Guilloux ; A. Virouleau**, Identification of Positively and Negatively Selected Driver Gene Mutations Associated With Colorectal Cancer With Microsatellite Instability
- **C. Thomas**, No Additive Effects of Polyphenol Supplementation and Exercise Training on White Adiposity Determinants of High-Fat Diet-Induced Obese Insulin-Resistant Rats
- **JL. Faulon ; B. Delepine**, RetroPath2.0 : A retrosynthesis workflow for metabolic engineers
- **B. Chaloub**, Genome-wide identification and comparative analysis of NBS-LRR resistance genes in *Brassica napus*
- **M. Champleboux M**, The rim pathway mediates antifungal tolerance in *candida albicans* through newly identified Rim 101 transcriptional targets, including Hsp90 and Ipt1
- **A. Tonda ; M. Elati**, Evolutionary optimization of convolutional neural networks for cancer miRNA biomarkers classification
- **G. Ronzitti ; F. Mingozzi**, Emerging Issues in AAV-Mediated In Vivo Gene Therapy
- **F. Mingozzi**, Influence of Pre-existing Anti-capsid Neutralizing and Binding Antibodies on AAV Vector Transduction
- **C. Garcia**, AAV-8 and AAV-9 Vectors Cooperate with Serum Proteins Differently Than AAV-1 and AAV-6

## → HUMANITIES AND SOCIAL SCIENCES

- **C. Perrin**, « Etienne Clémentel. Père de l'artisanat français », dans M.C. Kessler, G. Rousseau (dir.), *Etienne Clémentel. Politique et action publique sous la Troisième République*, Peter Lang, Bruxelles, 2018.
- **E. Le Port**, La réception des témoignages de mineurs par les éditeurs : attentes, usages et enjeux de l'écriture ouvrière dans la seconde moitié du XXe siècle, *Cahiers Jaurès*, « Les Mines, un terrain d'expérience - Hommage à Rolande Trempé », 2018/4
- **AS. Ozaygen ; C. Balagüé**, “Idea evaluation in innovation contest platforms: a network perspective”, *Decision support systems*, august 2018, vol. 112, pp. 15-22
- **CJ. Godlewski ; B. Sanditov**, “Financial institutions network and the certification value of bank loans”, *Financial management*, 2018, vol. 47, n° 2, pp. 253-283
- “Crowdfunding : la finance autrement ?” Coordonné par **G. Garmilis ; D. Trabesli ; O. Joffre**
- Society and Business Review special issue “Relatedness and the ethics of writing Organizations”. Coordonné par **JL. Moriceau**
- **S. Bosi ; C. Le Van ; N-S. Pham**, Intertemporal equilibrium with heterogeneous agents, endogenous dividends and borrowing constraints. *Journal of Mathematical Economics*, 76, 1-20 (2018)
- **S. Bosi ; T. Ha-Huy ; C. Le Van ; C-T. Pham ; N-S. Pham**, Financial bubbles and capital accumulation in altruistic economies. *Journal of Mathematical Economics*, 75, 125-139, (2018)
- **S. Bosi ; D. Desmarchelier**, Pollution and infectious diseases. *International Journal of Economic Theory*. May 2018 : <https://doi.org/10.1111/ijet.12157>
- **C. Chaton ; A. Creti ; ME. Sanin**, Assessing the implementation of the Market

Stability Reserve, *Energy Policy*, 118(C), 642-654, (2018)

- **A. Charles ; O. Darne ; F. Tripier**, Uncertainty and the macroeconomyb : evidence from an uncertainty composite indicator. *Applied Economics*, 50(10), 1093-1107, (2018)
- **T. Grjebine ; U. Szczerbowicz ; F. Tripier**, Corporate debt structure and economic recoveries. *European Economic Review*, 101, 77-100, (2018)
- **T. Ha-Huy ; C. Le Van ; C. Tran-Viet**, Arbitrage and equilibrium in economies with short-selling and ambiguity. *Journal of Mathematical Economics*, 76(C), 95-100, (2018)
- **ME. Sanin**, Counterpart choice in emission permits markets: beyond pollution abatement motives. *The Energy Journal*, 39(2), DOI: 10.5547/01956574.39.SI2.msan, (2018)
- **D. Bachet**, « Refonder l'entreprise, manière de compter, travail et pouvoir », *La Pensée*, 2018
- **D. Bachet**, “Sortir de l'entreprise capitaliste”, revue en ligne “Les Possibles” <https://france.attac.org/nos-publications/les-possibles/numero-17-ete-2018>
- **D. Bachet**, “Raison d'être des entreprises, normes comptables et choix politiques”, revue “Mouvements”, numéro 96 (2018/4).
- **E. Balteau**, « Bonjour-bonsoir. Des habitants face à la rénovation urbaine », *Métropolitiques*, 4 avril 2018
- **O. Caïra**, “Les dimensions multiples de l'engagement ludique”, *Sciences du jeu*, n°10, <https://journals.openedition.org/sdj/1149>
- **D. Glaymann**, « La socialisation et la construction identitaire à l'épreuve des situations vécues en stage », *Sociologies*, in *Dossiers*, « Identité au travail, identités professionnelles ». URL : <https://journals.openedition.org/sociologies/8779>

---

## NOTEWORTHY PUBLICATIONS 2018

---

- **D. Glaymann ; B. Scalvinoni**, « I sindacati francesi nella morsa dell'attuale contesto delle relazioni industriali » *Sociologia de Lavoro*, 151/2018, p. 210-234.
- **L. Goussard**, « Quais lutas sindicais são possíveis contra os danos à saúde dos trabalhadores qualificados ? », *Século XXI. Revista de Ciências Sociais*, vol. 8, n° 2, jul./dez. 2018, pp. 655-690.
- **L. Goussard Lucie ; G. Tiffon**, « Désindividualiser, reconflitualiser, repolitisier. Les enjeux contemporains des luttes syndicales autour de la santé au travail », *Les utopiques. Cahiers de réflexion*, Editions Syllepse, novembre 2018, pp. 80-89.
- **M. Peyrière**, « Sur le cinéma : Les théories en acte d'Edgar Morin (introduction de l'ouvrage) » *Revue Française des Méthodes Visuelles*, n° 2, juin 2018.
- **F. Sarfati**, « La proposition d'une deuxième chance ? », post-face au dossier Deuxième chance coordonné par Benjamin Denecheau et Gérald Houdeville, *Formation Emploi*, n° 143, 2018, pp. 203-208.
- **F. Sarfati ; C. Vivés**, « De l'intérim au CDI intérimaire. Se stabiliser dans le salariat pour limiter la subordination », *Sociétés contemporaines*, n° 110, 2018.
- **F. Sarfati ; J. Couronné**, « Une jeunesse (in)visible : Les « Neets vulnérables » de la Garantie jeunes », *Travail et Emploi*, n° 153, 2018, pp. 41-66.
- **A. Tilman**, « CADENCES. Retour sur la fabrique d'un film documentaire dans le cadre d'une thèse de sociologie », *Revue Française des Méthodes Visuelles*, n° 2, juin 2018.
- **E. Vallier**, « Voyage en cluster : qu'en est-il de sa promesse relationnelle ? », ARCS - Analyse de réseaux pour les sciences sociales, 2018.
- **R. Vallée**, « Fabriquer des effets visuels au cinéma et dans les jeux vidéo, un même métier ? Rencontre avec Pierre Villette » avec Caroline Renouard dans « Jeux vidéo et cinéma : une création interactive », dirigé par Marion Poirson-Dechonne, *CinémAction* n° 168, 2018, pp. 18-25.
- **J-P. Durand**, Entretien accordé aux *Cahiers Internationaux de Sociologie de la Gestion*, revue du RT 30 de l'AFS : <https://sociogest.hypotheses.org/re-vuecsg#18>, juin 2018.
- **G. Flocco**, préface d'un dossier thématique du CIRAP, Laurence Bessières, Les cadres de l'administration pénitentiaire et l'autorité. Variation des positions dans l'espace social pénitentiaire, Toulouse, ÉNAP, 2017, pp. 5-6.
- **J. Sebag ; J-P. Durand**, Entretien dans la *Revue Française des Méthodes Visuelles*, n° 2, juin 2018 : <https://rfmv.fr/>
- **J-P Durand**, « Pourquoi Marx aujourd'hui », *Écoflash*, Mensuel d'informations économiques et sociales, Canopé/CNDP, novembre 2018 et décembre 2018.
- **G. Flocco**, « Les aventures du sujet », *La Vie des idées*, 9 juillet 2018. <http://www.laviedesidees.fr/Les-aventures-du-sujet.html>
- **D. Ehrhardt**, « Le couple franco-allemand en musique : à la genèse des avant-gardes », *Les Essentiels d'Hermès*, CNRS-Editions, janvier/février 2018, Le couple franco-allemand.
- **B. Gauthier**, « L'intégration du créole chagossien dans un contexte français (roman) ou anglais (scénario) », in Actes du 1er Congrès Mondial de Traductologie, Nanterre d'Avril 2017, in « Sémantique(s), sémiotiques et traduction », *Revue Des mots aux actes* 2018, n° 7, sous la direction de Florence-Lautel Ribstein, en collaboration Avec Carmen Pineira Tresmontant, Paris, Classiques Garnier, 696 p. État des lieux de la traductologie dans le monde, Paris, Classiques Garnier, 2019. p. 537-563.
- **D. Ehrhardt**, « Réflexions sur la réception de Hindemith en France, 1922-2010 », *Hindemith-Jahrbuch / Annales Hindemith*, Hindemith-Institut Francfort/M., à paraître début 2018.
- **D. Ehrhardt**, « Musique et territoire. De la terre au monde », *Les Essentiels d'Hermès*, CNRS-Editions, à paraître 2018.
- **D. Ehrhardt**, « Entretien avec François Gros », *Hermès, La Revue - Cognition, communication, politique*, CNRS-Editions, (2018)
- **S. Roques**, « L'exploitation rationnelle d'un succès : le ressort des adaptations verniennes », *Revue d'Histoire du théâtre [Les commerces du théâtre]*, (janvier 2018).
- **S. Roques**, « Les mises à l'épreuve du corps sur les scènes contemporaines », *La Revue des Sciences Sociales « Performances du paraître »*, 2018, 10 p.
- **S. Roques**, « Théâtre », *Dictionnaire du corps en sciences humaines et sociales*, in Gilles Boëtsch et Bernard Andrieu (éd.), Paris, éditions du CNRS, nouvelle édition, 2018, 5 p.
- **D. Ehrhardt ; H. Fleury**, « Luminosité dans la lumière goethéenne et dialogue des arts au Bauhaus », (novembre 2018).
- **D. Ehrhardt ; H. Fleury**, « From Marx to Counterculture. The Marxian Vision of Art(ist) and Véquaud's Maithil Village Communitarian Utopia: A Renewed Romanticism? », (juillet 2018)
- **D. Ehrhardt**, « Claude Debussy, une autre musique à programme ? »
- **C. Floros ; M. Grabocz ; D. Ehrhardt ; J. Grimalt**, « Constantin Floros, l'homme, l'amour et la musique »
- **F. Jawadi ; N. Jawadi ; Al. Cheffou**, « Toward a new deal for Saudi Arabia : oil or Islamic stock market investment ? »
- **H. Sadi**, The penitentiary of Nabile Fares
- **F. Jawadi**, INTRODUCTION TO RECENT INSIGHTS INTO FINANCIAL, HOUSING, AND MONETARY MARKETS
- **F. Jawadi**, MODELING INTERNATIONAL STOCK PRICE COMOVEMENTS WITH HIGH-FREQUENCY DATA
- **T. Roncalli**, Keep up the momentum
- XF. Ma, Banks, sovereign risk and unconventional monetary policies
- S. Crepey, XVA PRINCIPLES, NESTED MONTE CARLO STRATEGIES, AND GPU OPTIMIZATIONS
- GB. Grey, Territory and Central American and Mexican Youth in the Cinematic Work of Julio Hernandez Cordon
- **F. Jawadi ; H. Namouri**, An analysis of the effect of investor sentiment in a heterogeneous switching transition model for G7 stock markets
- **N. Jarroux ; MJ. Clement ; M. Gervais ; S. Moriau ; O. Maciejak ; PA. Curmi ; H. Cheradame**, Templated polycondensation of aminopropyltrimethoxysilane on DNA
- TL. Quoc, Real-Time business data acquisition : How frequent is frequent enough ?
- **A. Wissocq ; C. Beaucaire**, Application of the multi-site ion exchanger model to the sorption of Sr and Cs on natural clayey sandstone
- HH. Thai, Arbitrage and equilibrium in economies with short-selling and ambiguity
- L. Brembilla, Longevity and welfare in general equilibrium
- **F. Jawadi**, Assessing the Effect of Trade Openness on Health in the MENA Region : a Panel Data Analysis
- **F. Jawadi**, Analyzing the governance structure of French banking groups
- **S. Bosi ; D. Desmarchelier**, Limit Cycles Under a Negative Effect of Pollution on Consumption Demand : The Role of an Environmental Kuznets Curve
- **F. Tripier**, Uncertainty Fluctuations : Measures, Effects and Macroeconomic Policy Challenges
- **F. Jawadi ; N. Jawadi ; Al. Cheffou**, Uncertainty assessment in socially responsible and Islamic stock markets in the short and long terms : an ARDL approach
- **H. Namouri ; F. Jawadi**, Threshold effect in the relationship between investor sentiment and stock market returns : a PSTR specification

---

## NOTEWORTHY PUBLICATIONS 2018

---

- R. Vallée, Le documentaire en 360°, un point de vue impossible ? Étude de NYT VR et Arte 360
- C. Perrin, Un ordre économique sans machine ? : Penser et repenser l'artisanat et la société française au XXe siècle
- S. Sourisseau, The Global Iron and Steel Industry : From a Bilateral Oligopoly to a Thwarted Monopsony
- C. Perrin, The creation of the lycée Grandmont in Tours (1954-1963) : An unplanned technical school [La création du lycée Grandmont à Tours (1954-1963) : L'imromptue mise en lycée de l'enseignement technique]
- G. Garmilis, L'equity crowdfunding, une régulation traditionnelle pour un modèle innovant ?
- JL. Moriceau, Guest editorial. Can the researcher learn ? Relatedness and the ethics of writing
- JL. Moriceau, An interview with Alphonso LINGIS
- C. Vivès, Discontinuity in employment and unemployment insurance. Special issue introduction
- C. Dupuy, La démocratie au travail : Un faux consensus ?
- D. Trabesli ; O. Joffre, Crowdfunding : concepts, realities and prospects
- V. Bouhier, Chronique le droit de l'énergie dans l'Union européenne pour l'année 2017
- C. Balagué, Développer des algorithmes responsables
- C. Balagué, Objets connectés : gadgets ou véritables innovations ?
- C. Balagué, Santé : pourquoi certains objets connectés sont un succès et d'autres font un flop ?
- O. Bui-Xuan, Droit et genre - REGINE : janvier 2017 - janvier 2018
- CB. Grey, El cine : entre el relato histórico, el arte y la política. El relato histórico en Juarez
- E. Vallier, Journey in cluster : what about its relational promise ?
- CB. Grey, Territorio y juventud en América central y México en el cine de Julio Hernández Cordón
- JL. Moriceau, The cocktail or about war in business affairs
- JL. Moriceau, The politics of writing and the performativity of ordinary people's speech in Jacques Rancière's method of equality
- JL. Moriceau, Voice performativity. Lessons from the Lucernaire case
- JL. Moriceau, Writing the qualitative : reflexive writing, writing the plural, writing as performance
- G. Tisser, Bowie's Way : une analyse harmonique de « Life on Mars ? »
- M. Guerpin, Pour une génétique de l'improvisation musicale - première partie : éléments théoriques
- H. Rabault, « De l'Empire à l'Union... », recension de Jo Eric Khushal Murkens, From Empire to Union. Conceptions of German Constitutional Law since 1871, Oxford University Press, 2013, Revue française de droit constitutionnel, n° 166, 2018, p. 989-994
- H. Rabault, « Le Conseil d'Etat juge constitutionnel », note sous Conseil d'Etat 13 décembre 2017, req. n° 411788, Président du Sénat, Les Petites Affiches, 26 mars 2018, n° 61, p. 13-19
- H. Rabault, « Le contrôle juridictionnel des tarifs réglementés de l'énergie : le régime applicable à la distribution d'électricité », note sous Conseil d'Etat, ass., 18 mai 2018, req. n° 413688, 414656, Société Engie et Association nationale des opérateurs détaillants en énergie (ANODE), Les petites affiches, 28 novembre 2018, n° 238, p. 9-21
- H. Rabault, « Le problème de la constitution dans le contexte de la globalisation », Archives de philosophie du droit, n° 60, 2018, p. 381-389
- H. Rabault, « Le statut constitutionnel de l'université », note sous Conseil constitutionnel, 8 mars 2018, n° 2018-763 DC, loi relative à l'orientation et à la réussite des étudiants, Les petites affiches, 24 avril 2018, n° 82, p. 6-15
- C. Bouveresse, Susan Meiselas, une révolution à rebours : Nicaragua, 1978-2004
- C. Bouveresse, A commercial collection is recognised as heritage : the conservation and promotion of the Magnum archives
- S. Herault, Intrusive digital advertising : from control to resistance ?
- I. Taillandier-Guittard, « Le tempo, marqueur formel et vecteur expressif dans les "Danseuses de Delphes" de Claude Debussy »
- I. Taillandier-Guittard, « L'esthétique musicale dans la Revue de musicologie. Définitions, statuts et enjeux »
- G. Verdugo, La stratégie de l'union européenne pour promouvoir l'égalité professionnelle est-elle efficace ?
- M.A. Boutabba, Environment-energy-growth nexus in Sub-Saharan Africa : The role of intermediate goods
- F. Jawadi, Measurement errors in stock markets
- MA. Boutabba, Agricultural technologies and carbon emissions : evidence from Jordanian economy
- A. d'Andria, Resilience and effectuation for a successful business takeover
- F. Cardi ; JP. Durand ; JP. Lenoir ; J. Sebag, May and June 1968 : a photographic notebook
- F. Compin, Terrorism financing and money laundering : two sides of the same coin ?
- A.P. Michel, Pierre Bézier et ses machines-outils : La pensée technique d'un mécanicien en miroir des controverses machinistes de son temps (1920-1980)
- C. Morley, Feminist approach and IS research : A study of MIS Quarterly [Approche féministe et recherche en S.I. : Une étude de MIS Quarterly.]
- G. Cecere, Price or performance ? A probabilistic choice analysis of the inten-


**EXACT SCIENCES**

- **M. Jeanblanc ; L. Li ; S. Song**, « An enlargement of filtration formula with applications to multiple non-ordered default times ». In : Finance and Stochastics,22.1 (2018), p. 205-240.
- **V. Banica ; L. Vega**, « Singularity formation for the 1-D cubic NLS and the Schrödinger map on  $S^2$  ». In : Commun. Pure Appl. Anal. (2018).
- **D. Chamorro ; PG. Lemarié-Rieusset ; K. Mayoufi**, « The role of the pressure in the partial regularity theory for weak solutions of the Navier-Stokes equations ». In : Arch. Rat. Mech. Anal. 228.1 (2018), p. 237-277.
- **F. Guinot ; M. Szafrański ; C. Ambroise ; F. Samson**, « Learning the optimal scale for GWAS through hierarchical SNP aggregation. » In : BMC Bioinformatics, 19(1):459, BioMed Central, 2018.
- **A. Bayad**, Mean Values of Products of L-Functions and Bernoulli Polynomials
- **JM. Bernard**, Fully nonhomogeneous problem of two-dimensional second grade fluids
- **A. Chpoun**, Assessment of transition regimes in a dual-bell nozzle and possibility of active fluidic control
- **A. Gloter**, ASYMPTOTICS IN SMALL TIME FOR THE DENSITY OF A STOCHASTIC DIFFERENTIAL EQUATION DRIVEN BY A STABLE LEVY PROCESS
- **A. Gloter ; D. Loukianova**, JUMP FILTERING AND EFFICIENT DRIFT ESTIMATION FOR LEVY-DRIVEN SDES
- **L. Blin**, A self-stabilizing memory efficient algorithm for the minimum diameter spanning tree under an omnipotent daemon
- **F. Chu**, (PR IUT Evry) et responsable de l'équipe AROBAS, a obtenu le "Best Paper Award" à la conference ICSSSM 2018 (15th International Conference on Service Systems and Service Management) qui a eu lieu les 21-22 juillet 2018 à Hangzhou en Chine. La contribution est intitulée: "A Two-stage Stochastic Programming Approach for Aircraft Landing". Cet article est le fruit d'une ecollaboration entre l'Université d'Evry, Centrale Supélec, the Tongji University (Chine) et the Donghuang University (Chine).
- **I. Ajili**, doctorante au sein de l'équipe IRA2 (2015-2018), actuellement ATER à l'UFR ST, a reçu le « Best Paper Award » à la conférence ICIAP'2018 (Paris, 29-30 octobre 2018). Son article est intitulé « Relevant LMA Features for Human Motion Recognition ».
- **F. Chu**, A new distribution-free model for disassembly line balancing problem with stochastic task processing times
- **S. Fusil**, Real-time switching dynamics of ferroelectric tunnel junctions under single-shot voltage pulses
- **P. Ngae**, An Optimization-Based Approach for Source Term Estimations Of Atmospheric Releases
- **F. Chu**, Two Yard Crane Scheduling With Dynamic Processing Time and Interference
- **S. Mammar**, Robust interval observer for switched systems with unknown inputs : Application to vehicle dynamics estimation
- **J. Lerbet**, Coordinate free nonlinear incremental discrete mechanics
- **S. Carmona ; Y. Rouizi ; O. Quemener ; F. Joly ; A. Neveu**, Estimation of heat flux by using reduced model and the adjoint method. Application to a brake disc rotating
- **D. Regnault**, Lost in self-stabilization : A local process that aligns connected cells
- **S. Mammar**, Fault Detection and Isolation via the Interacting Multiple Model Approach Applied to Drive-By-Wire Vehicles
- **Y. Bouzid ; Y. Bestaoui**, Flight control boosters for three-dimensional trajectory tracking of quadrotor : Theory and experiment
- **Y. Bouzid ; Y. Bestaoui**, Energy based 3D trajectory tracking control of quadrotors with model-free based on-line disturbance compensation
- **G. Hello**, Derivation of complete crack-tip stress expansions from Westergaard-Sanford solutions
- **M. Bouafia**, Compressible Coupled Natural Convection and Volumetric Radiation in a Square Cavity
- **D. Chamorro** ; S. Menozzi, Non Linear Singular Drifts and Fractional Operators: when Besov meets Morrey and Campanato
- **S. Pulido**, The Jacobi stochastic volatility model
- **JT. Liu**, A COMPUTATIONAL STRATEGY TO EXAMINE THE PROFILE EFFECTS OF MICROPRISM REGIONS ON THE OVERALL ANISOTROPY OF HUMAN ENAMELS
- **F. Chu**, An Improved Model for Parallel Machine Scheduling Under Time-of-Use Electricity Price
- **F. Chu**, Bi-Objective Scheduling of Fire Engines for Fighting Forest Fires : New Optimization Approaches
- **L. Blin**, Compact deterministic self-stabilizing leader election on a ring : the exponential advantage of being talkative
- **A. Gloter**, Bouncing Skew Brownian Motions
- **S. Menozzi**, Martingale problems for some degenerate Kolmogorov equations
- **PG. Lemarie-Rieusset**, Sobolev multipliers, maximal functions and parabolic equations with a quadratic nonlinearity
- **F. Chu**, Recent advances and opportunities in sustainable food supply chain : a model-oriented review
- **F. Chu**, Scheduling on a two-machine permutation flow shop under time-of-use electricity tariffs
- **J. Lerbet**, Vibration of a Timoshenko beam supporting arbitrary large pre-deformation
- **S. Mammar**, How to cope with unmeasurable premise variables in Takagi-Sugeno observer design : Dynamic extension approach
- **M. Bouafia**, Effect of radiation on the flow structure and heat transfer in a two-dimensional gray medium
- **I. Ajili ; M. Mallem**, Human Motions and Emotions Recognition Inspired by LMA Qualities
- **A. Gloter**, Lamin property for the drift and volatility parameters of a SDE driven by a stable LEVY process
- **H. Hadj-Abdelkader**, Pedestrian using catadioptric sensor
- **G. Damm**, Nonlinear Control for Isolated DC MicroGrids
- **E. Angel**, Parameterized Power Vertex Cover
- **Z-Q. Feng**, Application of the bi-potential integration algorithm to non-associated materials
- **Z.Q. Feng**, Application of the Bipotential Theory to a Nonassociated Drucker-Prager Model
- **P-M. Damon ; H. Hadj-Abdelkader ; H. Arioui**, Image-Based Lateral Position, Steering Behavior Estimation, and Road Curvature Prediction for Motorcycles
- **S. Ivanov**, P systems with randomized right-hand sides of rules
- **J-R. Pycke ; V. Billat**, Detecting the marathon asymmetry with a statistical signature
- **V. Billat**, Humans are able to self-paced constant running accelerations until exhaustion
- **Z-Q. Feng ; P. Joli**, A semi-explicit algorithm for solving multibody contact dynamics with large deformation

---

## NOTEWORTHY PUBLICATIONS 2018

---

- **Z-Q. Feng**, A computational strategy for the modeling of elasto-plastic materials under impact loadings
- **L. Beji**, Stability analysis of coupled torsional vibration and pressure in oilwell drillstring system
- **V. Vigneron**, Non-negative sub-tensor ensemble factorization (NsTEF) algorithm. A new incremental tensor factorization for large data sets.
- **C. Monville**, Engineering transplantation-suitable retinal pigment epithelium tissue derived from human embryonic stem cells
- **C. Cluzel**, The Double Drum Peel (DDP) test : A new concept to evaluate the delamination fracture toughness of cylindrical laminates
- **L. Beji**, Finite-time consensus for controlled dynamical systems in network
- **A. Vidal**, Coupled Multiple Timescale Dynamics in Populations of Endocrine Neurons : Pulsatile and Surge Patterns of GnRH Secretion
- **S. Crepey**, Multivariate Shortfall Risk Allocation and Systemic Risk
- **L. Beji**, Sliding surface-based obstacle avoidance for second order multi-agent systems
- **F. Delaplace ; H. Klaudel**, Activity Networks with Delays an Application to Toxicity Analysis
- **L. Corrias**, A DIFFERENTIAL MODEL FOR GROWING SANDPILES ON NETWORKS
- **A. Bayad**, Zeta functions interpolating the convolution of the Bernoulli polynomials
- **C. Bertrand ; H. Klaudel**, Pattern Matching in Link Streams : Timed-Automata with Finite Memory
- **N. Agoulmine**, Blockchain Technology : Is It a Good Candidate for Securing IoT Sensitive Medical Data ?
- **D. Ichalal**, State estimation of system with bounded uncertain parameters : Interval multimodel approach
- **D. Ichalal ; V. Vigneron**, Interval observer for LPV systems with unknown inputs
- **L. Beji**, Backstepping boundary observer based-control for hyperbolic PDE in rotary drilling system
- **F. Delaplace**, Abductive Network Action Inference for Targeted Therapy Discovery
- **M. Jeanblanc**, Conic martingales from stochastic integrals
- **M. Jeanblanc**, No-arbitrage under a class of honest times
- **Hanczar**, B, An approach to optimizing abstaining area for small sample data classification
- **Pascal**, M, A new model of dry friction oscillator colliding with a rigid obstacle
- **Adjed**, F, Segmentation of pectoral muscle using the adaptive gamma corrections
- **C. Profeta**, On the supremum of products of symmetric stable processes
- **C. Profeta**, A REMARK ON POSITIVE SOJOURN TIMES OF SYMMETRIC PROCESSES
- **NJB. Brunel**, Optimal Control and Additive Perturbations Help in Estimating Ill-Posed and Uncertain Dynamical Systems
- **M. Jeanblanc ; AD. Sezer**, Joint densities of hitting times for finite state Markov processes
- **S. Akhegaonkar ; L. Nouveliere**, Smart and Green ACC : Energy and Safety Optimization Strategies for EVs
- **J. Escareno**, Modeling and Control of an Interactive Tilt-rotor MAV for In-contact Cracks-sensing Operations
- **C. Ambroise**, Epigenetics in Forest Trees : State of the Art and Potential Implications for Breeding and Management in a Context of Climate Change
- **F. Belardinelli**, Second-order propositional modal logic : Expressiveness and completeness results



Création/félicitation : délicate essence - www.delicate-essence.fr Crédits photos : Lionel Antoni / Adobe Stock



université  
PARIS-SACLAY

**Université d'Évry**  
Bâtiment Île-de-France  
23 boulevard François Mitterrand  
91000 Évry-Courcouronnes

[www.univ-evry.fr](http://www.univ-evry.fr)

