

## MONDAY, MAY 16, 2011

- **International Workshop on Game Theory in Communication Networks (GAMECOMM), chaired by Eduard JORSWIECK and Walid SAAD. Room: CURIE.**

08:30 – 09 :00 *Registration*

**09 :00 – 10 :00 Plenary talk, “Cooperative Game Theory for Cognitive Radio”, Professor Zhu HAN, University of Houston, USA.**

10 :00 – 10:30 *Coffee break*

10 :30 – 10:55 “Coopetition for Efficient Sharing of Radio Resources”, M. Parzy, H. Bogucka.

10:55 – 11:20 “Graph-based Coalitional Games - An Analysis via Characteristics”, F. Nebel.

11:20 – 11:45 “Low Complexity Resource Allocation for OFDMA Based on Coalitional Game Theory”, F. Shams, G. Bacci and M. Luise.

11:45 – 12:10 “The Jamming Game in an OFDM Setting”, F. Renna, N. Laurenti and Y.-C. Hu.

12:10 – 12 :35 “Adversarial Behavior in Network Mechanism Design”, A. K. Chorppath and T. Alpcan.

12:35 – 13:30 *Lunch break*

13:30 – 13:55 “Power Allocation in Team Jamming Games in Wireless Ad Hoc Networks”, S. Bhattacharya, A. Khamfer, and T. Basar.

13:55 – 14:20 “Routing Games in the Many Players Regime”, E. Altman, Z. Altman, R. Combes, and S. Sorin.

14:20 – 14:45 “Cooperative Virtual Machine Management for Multi-Organization Cloud Computing Environment”, D. Niyato, K. Zhu, and P. Wang.

14:45 – 15:10 “Revenue Maximization in a Spectrum Auction for Dynamic Spectrum Access”, A. Kakhbod, A. Nayyar, and D. Teneketzis.

15:10 – 15:35 “A Mean Field Stochastic Game for SINR-based Medium Access Control”, H. Tembine, P. Vilanova, M. Assaad, and M. Debbah.

15:35 – 16:00 *Coffee break*

16:00 – 16:25 “Universal Linear Pricing for Multiple Access and Broadcast Channels under QoS Requirements”, F. Shen and E. A. Jorswieck.

16:25 - 16:50 “Learning to Use the Spectrum in Self-Configuring Heterogenous Networks: A Logit Equilibrium Approach”, S. M. Perlaza, S. Lasaulce, H. Tembine, and M. Debbah.

16:50 – 17:15 “The Price of Re-establishing Almost Perfect Monitoring in Games with Arbitrary Monitoring Structures”, M. Le Treust and S. Lasaulce.

- **International Workshop on New Computational Methods for Inverse Problems (NCMIP), chaired by Pierre-Yves JOUBERT and Laurent FRIBOURG. Room: CONDORCET.**

8:30 – 09:00	<i>Registration</i>
<b>09:00 – 10:00</b>	<b>Plenary Talk, "Recursive Inference for Inverse Problems using Variational Bayes Methodology", Professor Anthony QUINN, Trinity College, Dublin, Ireland.</b>
10:00 – 10:30	<i>Coffee break</i>
10:30 – 11:00	"Time Reversed Absorbing Conditions in the Time Domain", F. Assous, M. Kray, F. Nataf, and Eli Turkel.
11:00 – 11:30	"Linear Inverse Problems with Noise: Primal and Primal-Dual Splitting", F.-X. Dupé, J. Fadili, and J.-L. Starck.
11:30 – 12:00	"Circular Harmonic Decomposition Approach for Numerical Inversion of Circular Radon Transforms", G. Rigaud, M. K. Nguyen, and A. K. Louis.
12:00 – 12:30	"3D Modelling of Electromagnetic Time Reversal: Localization of a Dielectric Object in a Half-space", M. Benhamouche, L. Bernard, L. Pichon, and D. Lesselier.
12:30 – 13:30	<i>Lunch break</i>
<b>13:30 – 14:30</b>	<b>Invited talk, "Optimising Sparse Data for Image Reconstruction with the Laplace Equation", Professor Joachim Weickert, Saarland University, Saarbrücken, Germany.</b>
14:30 – 15:00	"Regularizing Parameter Estimation for Poisson Noisy Image Restoration", M. Carlván and Laure Blanc-Féraud.
15:00 – 15:30	"Searchlight CT: A New Reconstruction Method for Collimated X-ray Tomography", R. Azencott, B. Bodmann, D. Labate, A. Sen, K. Li, and X. Zhou.
15:30 – 16:00	<i>Coffee break</i>
<b>16:00 – 17:00</b>	<b>Invited talk, "Qualitative Non-Iterative Methods in Inverse Scattering Problems", Professor Marc Bonnet, ENSTA-CNRS, Paris, France.</b>
17:00 – 17:30	"Topology Optimization for Solving Electromagnetic Inverse Problem", J. Denies, H. Ben Ahmed, and B. Dehez.
17:30 – 18:00	"Imaging and Detection of Cracks in Metallic Structures with Eddy Current Sensors", D. Placko, T. Bore and P.-Y. Joubert.

**TUESDAY, MAY 17, 2011**

*08:15 – 08:45 Registration*

**08:45 – 09:00** Opening speech by Jean-François ROCH, Vice-President of École Normale Supérieure de Cachan and Samson LASAULCE, VALUETOOLS'11 general chair. Room: CURIE.

**09:00 – 10:00 Plenary talk 1, “Performance Evaluation: A Randomization Viewpoint”, Professor Roberto TEMPO, Politecnico di Torino, Italy.** Room: CURIE.

*10:00 – 10:30 Coffee break*

*Morning sessions*

- **Modern Tools for Control (invited authors).** Room: CURIE.

**Chair: Nahum Shimkin**

10:30 – 11:00	“A Positioning of Cooperative Differential Games”, J. Engwerda.
11:00 - 11:30	“Large-scale Games in Large-scale Systems”, H. Tembine.
11:30 – 12:00	“Collaborative Estimation of Gradient Direction by a Formation of AUVs”, L. Brinon Arranz, A. Seuret, A. Sarlette, and C. Canudas de Wit.
12:00 – 12:30	“Hamilton-Jacobi Approach for Motion Planning and Reachability analysis”, H. Zidani, O. Bokanowski, and A. Desilles.

- **Modern Tools for Wireless 1.** Room: CONDORCET.

**Chair: Muriel Médard**

10:30 – 12:45	“A Self-Optimization Method for Coverage-Capacity Optimization in OFDMA Networks with MIMO”, R. Combes, Z. Altman, and E. Altman.
	“Stability and Asymptotic Optimality of Opportunistic Schedulers in Wireless Systems”, U. Ayesta, M. Erousquin, M. Jonckheere, and I. M. Verloop.
	“Stability of Spatial Wireless Systems with Random Admissible-Set Scheduling”, N. Bouman, S. Borst, and J. van Leeuwen.
	“Optimal Base Station Placement: A Stochastic Method Using Interference Gradient In Downlink Case”, S. Malik, A. Silva, and J.-M. Kelif.
	“Analytic Performance Evaluation of Opportunistic Spectrum Access with Detection Errors”, P. Tortelier.
	“Continuous Polling with Rerouting and Applications to Ferry Assisted Wireless LANs”, K. Veerarun.

*12:45 – 14:00 Lunch break*

*Afternoon sessions*○ **Petri Nets. Room: CURIE.****Chair: Andrea Marin**

14:00 – 15:30	<p>“Deriving Generalised Stochastic Petri Net Performance Models from High-Precision Location Tracking Data”, N. Anastasiou, T.-C. Horng, and W. Knottenbelt.</p> <p>“Hierarchically Constructed Petri-nets and Product-forms”, P. Harrison and C. Llado.</p> <p>“A Symbolic Approach to Quantitative Analysis of Preemptive Real-time Systems with Non-Markovian Temporal Parameters”, L. Carnevali, J. Giuntini, and E. Vicario.</p> <p>“Exploiting Multiformalism Models for Testing and Performance Evaluation in SIMTHESy”, E. Barbierato, M. Gribaudo, and M. Iacono.</p>
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○ **Modern Tools for Wireless 2. Room: CONDORCET.****Chair: Ana Busic**

14:00 – 15:30	<p>“Modeling Network Coded TCP Throughput: A Simple Model and its Validation”, M. Kim, M. Médard, and J. Barros.</p> <p>“Network Coding Schemes for the Multiple-Access Relay Channel”, C. Hausl, O. Iscan, and S. Dierks.</p> <p>“Joint Network/Channel Decoding for Heterogeneous Multi-Source/Multi-Relay Cooperative Networks”, C. Poulliat and M. Di Renzo.</p> <p>“Large-Deviations Analysis for Energy-Saving Mechanisms in Wireless Networks”, K. De Turck, D. Fiems, S. De Vuyst, H. Bruneel, and S. Wittevrongel.</p>
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*15:30 – 16:00 Coffee Break***Queueing theory. Room: CURIE.****Chair: Uri Yechiali**

16:00 – 18:15	<p>“Explicit Solutions for Queues with Hypo-exponential Service Time and Applications to Product-form Analysis”, A. Marin and S. Rota Bulò.</p> <p>“Efficient Parallelization of the Method of Moments for Queueing Networks Using Multi-modular Algebra”, M. Makaronidis and G. Casale.</p> <p>“Stochastic Comparisons for an M/G/1 Queue with General Retrial Times”, M. Boualem, N. Djellab, and D. Aissani.</p> <p>“Efficient Calculation of Rare Event Probabilities in Markovian Queueing Networks”, L. Mikeev, W. Sandmann, and V. Wolf.</p> <p>“Bounding Techniques for Transient Analysis of G-Networks with Catastrophes”, H. Castel-Taleb, I. I. Aouled, and N. Pekergin.</p> <p>“Acceleration of Perfect Sampling by Skipping Events”, F. Pin, A. Busic, and B. Gaujal.</p>
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**WEDNESDAY, MAY 18, 2011**

08:30 – 09:00 Registration

**09:00 – 10:00 Plenary talk 2, “Stability & Selection in Game Theoretic Learning”, Professor Jeff SHAMMA, Georgia Tech, USA. Room: Curie.**

10:00 – 10:30 Coffee break

*Morning Sessions*

- **Learning and Distributed Optimization. Room: CURIE.**

**Chair: Tansu Alpcan**

10:30 – 12:20	<p>“Selfish Routing Revisited: Degeneracy, Evolution and Stochastic Fluctuations”, P. Mertikopoulos and A. Moustakas.</p> <p>“Distributed Stochastic Approximation for Constrained and Unconstrained Optimization”, P. Bianchi and J. Jakubowicz.</p> <p>“A Framework for Optimization under Limited Information”, T. Alpcan.</p> <p>“On Distributed Power Control and Transceiver Optimization in Wireless Networks”, S. Stanczak, M. Kaliszan, and M. Goldenbaum.</p> <p>“Model for Sharing Femto Access”, M. Krichen, J. Cohen, and D. Barth.</p>
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- **Network Traffic Analysis. Room: CONDORCET.**

**Chair: William Knottenbelt**

10:30 – 12:20	<p>“Simulating Flow Level Bandwidth Sharing with Pareto distributed File Sizes”, J. Rojas-Mora, T. Jimenez, and E. Altman.</p> <p>“HS-measure : a Hybrid Clustering Validity Measure to Interpret Road Traffic Data”, Y. Naija and K. Blibech.</p> <p>“K-means and Adaptive k-means Algorithms for Clustering DNS Traffic”, Q. Xu, D. Migault, S. Sénécal, and S. Francfort.</p> <p>“Automatic Protocol Signature Generation Framework for Deep Packet Inspection”, G. Szabo, Z. Turanyi, L. Toka, S. Molnar, and A. Santos.</p> <p>“A Survey on YouTube Streaming Service”, M. Haddad, E. Altman, R. El-Azouzi, and T. Jimenez.</p>
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12:45 – 14:00 Lunch break

**14:00 – 15:00 Plenary talk 3, “Anomalous is Ubiquitous”, Professor Iddo ELIAZAR, Holon Institute of Technology, Israel. Room: CURIE.**

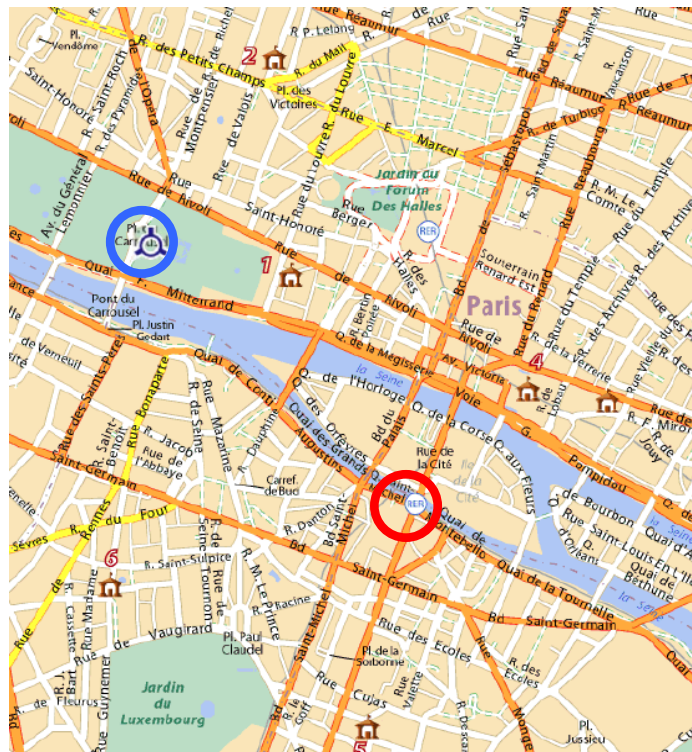
*Afternoon session*

- **Graph and Language. Room: CURIE.**

**Chair: Pete HARRISON**

15:00 – 15:30	”HASL: an Expressive Language for Statistical Verification of Stochastic Models”, P. Ballarini, H. Djafri, M. Duflot, S. Haddad, and N. Pekergin.
15:30 – 16:00	”Centrality Maps and the Analysis of City Street Networks”, T. Courtat, S. Douady, and C. Gloaguen.
16:00 – 16:30	<i>Coffee break</i>
16:30 – 19:00	FREE TIME SLOT
<b>19:00 – 23:00</b>	<b>◆◆ SOCIAL EVENT AT MUSÉE DU LOUVRES ◆◆</b> <hr/> The paper awards will be announced during the social event.

How to go to Musée du Louvres? From ENS Cachan, take the RER B Line at the station “BAGNEUX”, direction PARIS CDG, stop at the station “SAINT-MICHEL” (circle in red), and walk accordingly to the picture below till The Musée (circle in blue). See the VALUETOOLS website for more details (“Social event”).



**THURSDAY, MAY 19, 2011**

*08:30 – 09:00 Registration*

**09:00 – 10:00 Plenary talk 4, “Dynamic Teams and Games with Non-Standard Information”, Professor Tamer BASAR, University of Illinois at Urbana-Champaign, USA.  
Room: CURIE.**

*10:00 – 10:30 Coffee break*

*Morning sessions*

- **Game Theory and Resources Allocation. Room: CURIE.  
Chair: Samson Lasaulce**

10:30 – 12:45	<p>“Socially Optimal Pricing of Cloud Computing Resources”, I. Menache, A. Ozdaglar, and N. Shimkin.</p> <p>“Dynamic Power Allocation Games in Parallel Multiple Access Channels”, P. Mertikopoulos, E. V. Belmega, A. Moustakas, and S. Lasaulce.</p> <p>“Uplink Power Control and Subcarrier Assignment for an OFDMA Multicellular Network Based on Game Theory”, G. Bacci, A. Bulzomato, and M. Luise.</p> <p>“Accurate and Efficient Simulation of Bandwidth Dynamics for Peer-To-Peer Overlay Networks”, A. Gkogkas, R. Roverso, and S. Haridi.</p> <p>“Pricing Throughput and QoS in Wireless Communication”, A. Garnaeu, K. Avrachenkov, Y. Hayel, and E. Altman.</p> <p>“More about Base Station Location Games”, F. Meriaux, S. Lasaulce, and M. Kieffer.</p>
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- **Network Calculus. Room: Condorcet.  
Chair: Jean-Philippe Georges**

10:30 – 11:00	“Worst-case Delay Bounds with Fixed Priorities Using Network Calculus”, A. Bouillard and A. Junier.
11:00 – 11:30	“Modeling Quantitative Requirements in SLAs with Network Calculus”, S. Vastag.
11:30 – 12:00	“Network Calculus: Application to Switched Real-time Networking”, J.-P. Georges.
12:00 – 12:30	“A Temporal Network Calculus Approach to Service Guarantee Analysis of Stochastic Networks”, J. Xie and Y. Jiang.

*12:45 – 14:00 Lunch break*

*Afternoon session*○ **Structured Markov Chains (SMCTools session). Room: CURIE.****Chair: Konstantin Avrachenkov**

14:00 – 14:25	"On the Choice of the Stochastic Comparison Method for Multidimensional Markov Chains Analysis", H. Castel-Taleb and N. Pekergin.
14:25 – 14:50	"Optimal Index Rules for Dynamic and Stochastic Resource Allocation Problems", P. Jacko.
14:50 – 15:15	"Stability Bounds for Mt/Mt/N/N + R queue", A. Zeifman, A. Kortysheva, S. Shorgin, and V. Bening.
15:15 – 15:45	<i>Coffee break</i>
15:45 – 16:10	"QBD Sensitivity Analysis Tool Using Discrete-Event Simulation and Extension of SMCSolver", M.-A. Remiche and M. Cordy.
16:10 – 16:40	"Taylor Series Expansions for Queueing Systems with Train-arrivals", K. De Turck, D. Fiems, S. Wittevrongel and H. Bruneel.
16:40 – 17:05	"Two-buffer Fluid Models with Multiple ON-OFF Inputs and Threshold Assistance", G. Latouche, G.T. Nguyen, and Z. Palmowski.
17:05 – 17:30	"Properties of Hamiltonian Transition Matrices", K. Avrachenkov, A. Eshragh, and J. A Filar.
<b>17:30 – 17:40</b>	<b>Closing Speech, Samson LASAULCE, VALUETOOLS'11 general chair.</b>

FRIDAY, MAY 20, 2011
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- **International Workshop on Secure Wireless Networks (SECURENETS), chaired by Jean-Claude Belfiore and Mérouane Debbah. Room: CURIE.**

<i>08:30 – 09:00</i>	<i>Registration</i>
<b>09:00 – 10:00</b>	<b>Plenary talk, “Privacy-Utility Tradeoffs of Data Sources”, Professor Vincent POOR, Princeton University, USA.</b>
<i>10:00 – 10:30</i>	<i>Coffee break</i>
10:30 – 11:00	“On the Multi-Antenna Wiretap Channel with Delayed CSI at the Transmitter”, M. Kobayashi, P. Piantanida, S. Yang, and S. Shamai.
11:00 – 11:30	“Capacity-based Random Codes Cannot Achieve Strong Secrecy over Symmetric Wiretap Channels”, L. Luzzi and M. Bloch.
11:30 – 12:00	“Physical Layer Authentication over an OFDM Fading Wiretap Channel”, P. Baracca, N. Laurenti, and S. Tomasin.
<i>12:00 – 13:30</i>	<i>Lunch break</i>
<b>13:30 – 14:30</b>	<b>Plenary talk, “Mechanisms of Physical-Layer Security”, Professor Matthieu Bloch, Georgia-Tech, France.</b>
14:30 – 15:00	“MAC with Partially Cooperating Encoders and Security Constraints”, Z. H. Awan, A. Zaidi, and L. Vandendorpe.
15:00 – 15:30	“Secure Distributed Lossless Compression with Side Information at the Eavesdropper”, J. Villard and P. Piantanida.
15:30 – 16:00	Coffee break
16:00 – 16:30	“Relay and Jammer Cooperation as a Coalitional Game in Secure Cooperative Wireless Networks”, R. Zhang, L. Song, Z. Han, and B. Jiao.
16:30 – 17:00	“Achievable Secrecy Rates for Wiretap OFDM with QAM Constellations”, F. Renna, N. Laurenti, and H. Vincent Poor.