

François BACCELLI

SELECTED BIBLIOGRAPHY

Books, Thesis

- [B8] F.B. and B. BLASZCZYSHYN, “Spatial Modeling of Wireless Communications – A Stochastic Geometry Approach”, **Foundations and Trends in Networking**, NOW Publishers, 2009.
- [B7] F.B. and P. BREMAUD, “Modélisation et simulation des réseaux de communication” Cours **Ecole Polytechnique**, 2003.
- [B6] F.B., A. JEAN-MARIE and I. MITRANI (Ed.) “Quantitative Methods in Parallel Systems”, Basic Research Series, **Springer Verlag**, 1995.
- [B5] F.B. and P. BREMAUD, “Elements of Queueing Theory”, **Springer Verlag**, Applications of Mathematics, 1994. Second edition 2003.
- [B4] F.B., G. COHEN, G. OLSDER and J.P. QUADRAT “Synchronization and Linearity”, **Wiley**, 1992.
- [B3] F.B. and P. BREMAUD, “Palm probabilities and Stationary Queues”. **Lecture Notes in Statistics No. 41**, Springer Verlag, March 1987.
- [B2] F.B., “Modèles Probabilistes de systèmes informatiques distribués”. **Thèse de Doctorat d’Etat**, April 1983, Université Paris-Sud.
- [B1] F.B., “Files d’attente avec pannes et applications à la modélisation des systèmes informatiques”. **Thèse de 3e cycle**, janvier 1980, Université Paris-Sud.

Journal Submissions

- [J123] F.B., F. MATHIEU, I. NORROS, “On Spatial Point Processes with Uniform Births and Deaths by Random Connection”, <http://arxiv.org/abs/1408.6888>.
- [J122] F.B., H.A. CHANG-LARA and S. FOSS, “Shape Theorems for Poisson Hail on a Bivariate Ground”, [arXiv:1403.2166](https://arxiv.org/abs/1403.2166).
- [J121] V. ANANTHARAM and F.B. “The Boolean Model in the Shannon Regime: Three Thresholds and Related Asymptotics”, <http://arxiv.org/abs/1408.1338>, 2014.
- [J120] F.B. and M. O. HAJI-MIRSADEGHI, “Compactification of the Action of a Point-Map on the Palm Probability of a Point Process”, <http://arxiv.org/abs/1312.0287>, 2013.

Publications in Journals

- [J119] F.B. and N. M. TRAN, “Zeros of Random Tropical Polynomials, Random Polygons and Stick-Breaking” to appear in the **Proceedings of the American Mathematical Society**, <http://arxiv.org/abs/1403.7829>, 2014.

- [J118] F.B. and A. GIOVANIDIS, “Coverage by Pairwise Base Station Cooperation under Adaptive Geometric Policies”, invited talk at the Azilomar Conference, December 2013. To appear in **IEEE Transactions on Wireless Communications**, 2014.
- [J117] F.B. and A. BISWAS, “On Scaling Limits of Power Law Shot-noise Fields”, Under revision for **Stochastic Models**, <http://arxiv.org/abs/1404.5651>, 2014.
- [J116] Y. KIM, F. B. and G. DE VECIANA, “Spatial Reuse and Fairness of Ad Hoc Networks With Channel-Aware CSMA Protocols”, **IEEE Transactions on Information Theory**, Volume 60, Number 7, pp. 4139-4157, 2014.
- [J115] T.V. NGUYEN and F.B. “On the Generating Functionals of a Class of Random Packing Point Processes”, Under revision for **Stochastic Processes and Applications**, <http://arxiv.org/abs/1311.4967>, 2013.
- [J114] S. SINGH, F. B. and J. G. ANDREWS “On Association Cells in Random Heterogeneous Networks”, **IEEE Wireless Commun. Letters**, Volume 3, Number 1, pp. 70-73, 2014 <http://arxiv.org/abs/1310.1419>.
- [J113] F.B., D. COUPIER and V. C. TRAN, “Semi-infinite paths of the 2d-Radial Spanning”, **Advances in Applied Probability**. Volume 45, Number 4, pp. 895-916, 2013.
- [J112] R.K. GANTI, F.B. and J.G. ANDREWS, “Series Expansion for Interference in Wireless Networks,” **IEEE Transactions on Information Theory**, Vol. 58, No. 4, pp. 2194-2205, 2012.
- [J111] F.B. and P. BERMOLLEN, “Extremal versus Additive Matérn Point Processes” , **Queueing Systems**, Vol. 71, No. 1-2, pp. 179-197, 2012.
- [J110] M.K. HANAWAL, E. ALTMAN and F.B., “Stochastic Geometry Based Medium Access Games in Wireless Ad Hoc Networks”, Proceedings of **IEEE INFOCOM 2012** and **IEEE Journal on Selected Areas in Communications**, Vol. 30, No. 11, pp. 2146-2157, 2012.
- [J109] H.S. DHILLON, R.K. GANTI, F.B. and J.G. ANDREWS “Modeling and Analysis of K-Tier Downlink Heterogeneous Cellular Networks”, **IEEE Journal on Selected Areas in Communications**, Vol. 30, No. 2, pp. 550-560, 2012.
- [J108] C.S. CHEN and F.B. “Gibbsian Method for the Self-Optimization of Cellular Networks”, **EURASIP J. Wireless Comm. and Networking**, 2012.
- [J107] T. V. NGUYEN and F.B. “A Stochastic Geometry Model for Cognitive Radio Networks”, **The Computer Journal**, Vol. 55, No. 5, pp. 534-552, 2012.
- [J106] F.B., J. LI , T. RICHARDSON, S. SHAKKOTTAI, S. SUBRAMANIAN and X. WU “On Optimizing CSMA for Wide Area Ad-hoc Networks”, Proceedings of **WIOPT-SPASWIN’11**, Princeton, April 2011, **Queueing Systems**, Vol. 72, No. 1-2, pp. 31-68, 2012.
- [J105] F.B., A. EL GAMAL and D. TSE, “Interference Networks with Point-to-Point Codes”, proceedings of ISIT’11, St. Petersburg, Russia and special issue on Interference Networks of **IEEE Tr. Information Theory**, 2011, pp. 2582-2596.
- [J104] J. ANDREWS, F.B and R. GANTI, “A Tractable Approach to Cellular Network Modeling”, The 48th Allerton conference on communication, control and computing, 2010, **IEEE Transactions on Communications**, Vol. 59, No. 11, pp. 3122-3134, 2011.
- [J103] F.B. and S. FOSS, “Poisson Hail on a Hot Ground”, **Journal of Applied Probability**, Vol. 48, No. 1, 2011.
- [J102] V. ANANTHARAM and F.B., “Information Theoretic Capacity and Error Exponents of Stationary Point Processes with Additive Displacement Noise”, to appear in **Advances Applied Probability**, <http://arxiv.org/abs/1012.4924>.

- [J101] F.B., N. BAMBOS and N. GAST, “Distributed delay-power control algorithms for bandwidth sharing in wireless networks”, **IEEE/ACM Transactions on Networking (ToN)**, Vol. 19, No. 5, pp. 1458-1471, 2011.
- [J100] F.B., B. BLASZCZYSZYN and O. MIRSADEGHI, “Optimal Paths on the Space-Time SINR Random Graph”, **Advances in Applied Probability**, Vol. 43, No. 1, pp. 131-150, 2011.
- [J99] F.B., B. KAUFFMANN and D. VEITCH, “Towards multihop available bandwidth estimation”, **ACM SIGMETRICS Performance Evaluation Review**, Vol. 37, No. 2, pp. 83–84, 2009.
- [J98] F.B. and T. KONSTANTOPOULOS, “Stationary flows and uniqueness of invariant measures”, **Quart. Appl. Math.**, 2009.
- [J97] F.B., S. MACHIRAJU, D. VEITCH and J. BOLOT, “The Role of PASTA in Network Measurement”, **IEEE/ACM Transactions on Networking (ToN)**, Vol. 17, No. 4, p.p. 1340-1353, August 2009.
- [J96] F.B., B. BLASZCZYSZYN and P. MUHLETHALER, “Stochastic analysis of spatial and opportunistic Aloha”, **IEEE JSAC, special issue on Stochastic Geometry and Random Graphs for Wireless Networks**, Vol. 27, pp. 1105–1119, 2009.
- [J95] F.B., B. BLASZCZYSZYN and P. MUHLETHALER, “Time-Space Opportunistic Routing in Wireless Ad Hoc Networks, Algorithms and Performance”, **the Computer journal**, 2009.
- [J94] F.B., B. KAUFFMANN and D. VEITCH, “Inverse problems in queueing theory and Internet probing”, **Queueing Systems**, Vol. 63, Special Issue: 100 Years of Queueing — The Erlang Centennial, 2009.
- [J93] M. HAENGGI, J. ANDREWS, F.B., O. DOUSSE and M. FRANCESCHETTI, Introduction of the “Special Issue on Stochastic Geometry and Random Graphs for Wireless Networks”, **IEEE JSAC**, Vol. 27, 2009.
- [J92] F.B., G. CAROFIGLIO and S. FOSS, “Proxy Caching in Split TCP: Dynamics, Stability and Tail Asymptotics”, Proceedings **IEEE INFOCOM 2008**. Journal version in “From Semantics to Computer Science, Essays in honor of Gilles Kahn”, Yves Bertot, Gérard Huet and Gordon Plotkin Ed., **Cambridge University Press**, 2009.
- [J91] F.B., and McDONALD, D., “A Stochastic Model for the Throughput of Non-Persistent TCP Flows”, Proceedings of *ValueTools 06*, Pisa, October 2006, **Performance Evaluation** Vol. 65, No. 6-7, pp. 512-530, June 2008.
- [J90] S. MACHIRAJU, D. VEITCH, F.B. and J. BOLOT “Adding Definition to Active Probing” **ACM Computer Communication Review**, Vol. 37, No 2, pp. 17–28, April 2007.
- [J89] F.B. and C. BORDENAVE, “The Radial Spanning Tree of a Poisson Point Process”, Proceedings of the *43-th Allerton Conference*, 2005, **Annals of Applied Probab.** Vol. 17, No. 1, 305-359, 2007.
- [J88] F.B., P. MUHLETHALER et B. BLASZCZYSZYN, “An Aloha Protocol for Multihop Mobile Wireless Networks”, Proceedings of the *Allerton 03 Conference*, Illinois. **IEEE Transactions on Information Theory**. Vol. 52, No. 2, pp. 421–436, Jan. 2006.
- [J87] F.B., “Les réseaux de communication” **La Lettre de l’Académie**, No. 19, Spring 2006.
- [J86] F.B., A. CHAINTREAU, D. DE VLEESCHAUWER, D. Mc DONALD, “HTTP Turbulence”, **Networks and Heterogeneous Media (AIMS)**, Vol. 1 No. 1, March 2006.
- [J85] F.B., R. CRUZ and A. NUCCI, “On Wireless Channel Parameters Maximizing TCP Throughput”, in **IMA Volume 143 in Mathematics and its Applications: Wireless Communications**. P. Agrawal, M. Andrews, P.J. Fleming, G. Yin, et L. Zhang Ed., Springer, 2006.
- [J84] F.B., K.B. KIM and D. McDONALD, “Equilibria of a Class of Transport Equations Arising in Congestion Control,” **Queueing Systems**, Volume 55, Number 1, pp. 1–8, January, 2007.

- [J83] F.B., S. FOSS, and M. LELARGE, “Tails in Generalized Jackson Networks with Subexponential Service Distributions,” **J. Appl. Probab.** 42, no. 2 513-530, 2005.
- [J82] O. DOUSSE, F.B. and P. THIRAN, “Impact of Interferences on the Connectivity of Ad Hoc Networks”, Proceedings *IEEE INFOCOM’03* (nomination for the best paper award), San Francisco, 2003, **IEEE Transactions on Networking**, Volume 13, Number 1, Feb. 2005.
- [J81] F.B., A. CHAINTREAU, D. DE VLEESCHAUWER and D. Mc DONALD, “A Mean-Field Analysis of Short Lived Interacting TCP Flows”, Proceedings of *ACM Sigmetrics’04*, New York, June 2004 and **Performance Evaluation**.
- [J80] F.B., S. FOSS, and M. LELARGE, “Asymptotics of Subexponential Max Plus Networks; the Stochastic Event Graph Case, **Queueing Systems**, 46-1,2, 75–96, 2004.
- [J79] E. LETY, T. TURLETTI, and F.B., “Cell-based Multicast Grouping in Large-Scale Virtual Environments”, **IEEE Transactions on Networking**, Volume 12, Issue 2 247–260, April 2004.
- [J78] F.B., B. BLASZCZYSZYN, B. and M. KARRAY, “Up and Downlink Admission and Congestion Control and Maximal Load in Large Homogeneous CDMA Networks” Proceedings *WIOPT’03*, Sophia Antipolis, **ACM MONET**, Vol. 9, No. 6, Dec. 2004.
- [J77] F.B., D. Mc DONALD and J. REYNIER, “A Mean-field Model for Multiple TCP Connections Through a Buffer Implementing RED”, Proceedings of *IFIP Performance’02*, Rome, sept. 2002. *Performance Evaluation*, 49, pp. 77-97, 2002.
- [J76] F.B. and D. HONG, “Interaction of TCP flows as Billiards”, Proceedings of **IEEE INFOCOM’03** (nomination for the best paper award), San Francisco, 2003, **IEEE Transactions on Networking** Volume 13 , Issue 4 Pages: 841 - 853, August 2005.
- [J75] F.B., B. BLASZCZYSZYN and F. TOURNOIS, “Spatial Averages of Coverage Characteristics in Large CDMA Networks”, proceedings of **IEEE INFOCOM’02**, NY, jun. 2002, **ACM WINET (Wireless Networks)**, 8, 2002.
- [J74] F.B., “Modéliser le trafic pour mieux le gérer”, in *L’explosion des mathématiques*, **SMF-SMAI**, pp. 75-79, jul. 2002.
- [J73] F.B. and S. FOSS, “Moments and Tails in Monotone-Separable Stochastic Networks”, *IFAC Workshop on Max-Plus Algebras and their Applications to Discrete-event Systems, Theoretical Computer Science, and Optimization*, Prague, 2001, **Annals of Applied Probability**, 14-2, pp. 621-650, 2004.
- [J72] F.B., D. DE VLEESSCHAUWER, D. HONG, and G. PETIT, “End to End Network Performance Modeling”, **Alcatel Telecommunications Review (ATR)**, 3, pp. 223-227, 2001.
- [J71] A. CHAINTREAU, F.B. and C. DIOT, “Impact of Network Delay Variation on Multicast Session Performance with TCP-like Congestion Control”, proceedings **IEEE INFOCOM’01**, (nomination for the best paper award), Anchorage, **IEEE Transactions on Networking (ToN)**, 10, pp. 500-513, 2002.
- [J70] F.B. and D. HONG, “Slotted Jackson Networks”, submitted **QUESTA**, 2001.
- [J69] F.B., B. GAUJAL and D. SIMON, “Analysis of Preemptive Periodic Real Time Systems using the (max,plus) Algebra”, **IEEE transactions on Control Systems Technology (CST)**, 10-3, pp. 368-380, may 2002.
- [J68] A. AYHAN and F.B., “Expansions for Joint Laplace Transform of Stationary Waiting Times in (max,plus)-Linear Systems with Poisson Input”, **Queueing Systems (QUESTA)**, 37, pp. 291-328, 2001.
- [J67] F.B. and B. BLASZCZYSZYN, “On a Coverage Process Ranging from the Boolean Model to the Poisson-Voronoi Tessellation”, **Advances in Applied Probability**, 33, pp. 293-323, 2001.

- [J66] F.B., A. BOROVKOV and J. MAIRESSE, “Asymptotic Results on Infinite Tandem Queueing Networks”, **Probability Theory and Related Fields (PRTF)**, 118(3), pp. 365-405, 2000.
- [J65] F.B., C. GLOAGUEN and S. ZUYEV, “Superposition of Planar Voronoi Tessellations”, **Stochastic Models**, 16(1), 1999 (best paper award, Marcel Neuts Prize).
- [J64] F.B. and D. Mc DONALD, “Rare Events for Stationary Processes”, **Stochastic Processes and their Applications**, 89, pp. 141-173, 2000.
- [J63] F.B. and D. HONG, “Analyticity of Iterates of Random Non-Expansive Maps”, **Advances in Appl. Prob.** 32(1), mar. 2000
- [J62] F.B. and T. BONALD, “On the Stable Behaviors of Window Flow Control”, *36th IEEE Conference on Decision and Control*, San Diego, USA, 1997, **Queueing Systems (QUESTA)**, 32, 195-231, 1999.
- [J61] F.B., S. HASENFUSS and V. SCHMIDT, “Differentiability of Functionals of Point Processes”, **Stochastic Processes and their Applications**, 81, 299-321, 1999.
- [J60] F.B. and S. ZUYEV, “Poisson-Voronoi spanning trees with applications to the optimization of communication networks”, **Operations Research**, 47(4), 619-631, 1999.
- [J59] F.B. and D. HONG, “Analytic Expansions of $(\max,+)$ Lyapunov Exponents”, **Annals of Appl. Prob.**, 10(2), 779–827, 2000.
- [J58] F.B., S. SCHLEGEL and V. SCHMIDT, “Asymptotics of Stochastic Networks with Subexponential Service Times”, **Queueing Systems (QUESTA)**, 33, 205–23, 1999.
- [J57] R. AGRAWAL, F.B. and R. RAJAN, “An Algebra for Queueing Networks with Time Varying Service and its Application to the Analysis of Integrated Service Networks”, **Mathematics of Operations Research**, Vol. 29, No. 3, Aug., 2004.
- [J56] F.B., K. TCHOUMATCHENKO and S. ZUYEV, “Markov Paths on the Poisson-Delaunay Graph with applications to routing in mobile networks”, 1998, **Adv. Appl. Prob.** 32, 1-18, 2000.
- [J55] F.B., S. HASENFUSS and V. SCHMIDT, “Expansions for Steady State Characteristics in $(\max,+)$ Linear Systems,” Rapport INRIA No. 2785, 1996, **Stochastic Models** 14, 1998.
- [J54] F.B. and J. MAIRESSE, “Ergodic Theory of Stochastic Operators and Discrete Event Networks”, in Idempotency, **Cambridge Univ. Press**, Vol. 11, pp. 171-208, J. Gunawardena Ed., 1998.
- [J53] F.B. and S. ZUYEV, “Stochastic Geometry Models of Mobile Communication Networks”, in **Frontiers of Queuing Theory**, Volume 2, pp. 227-244, CRC Press, 1997.
- [J52] F.B., S. HASENFUSS and V. SCHMIDT, “Transient and Stationary Waiting Times in $(\max,+)$ Linear Systems with Poisson Input”, **Queueing Systems (QUESTA)**, 26, 1997.
- [J51] F.B., M. KLEIN, M. LEBOURGES and S. ZUYEV, “Stochastic geometry and architecture of communication networks” **Telecommunications Systems**, 7, pp. 209–227, 1997.
- [J50] F.B. and V. SCHMIDT, “Taylor Series Expansions for Poisson-Driven $(\max,+)$ -linear Systems,” **Annals of Applied Probability**, No. 6-1, pp. 138-185, 1996.
- [J49] F.B., S. FOSS and B. GAUJAL, “Free-choice Petri Nets, an Algebraic Approach”, **IEEE Tr. Aut. Contr.**, No. 41-12, pp. 1751-1778, 1996.
- [J48] F.B., S. FOSS and J. MAIRESSE, “Jackson Networks under Stationary Ergodic Assumptions, Results and Counter Examples”, **Proceedings of the Royal Statistical Society on Stochastic Networks**, Oxford University Press, 1996.
- [J47] F.B., M. KLEIN and S. ZUYEV, “Perturbation Analysis of Functionals of Random Measures.” **Adv. Appl. Probab.**, No. 27, pp. 306-325, 1995.

- [J46] F.B. and S. FOSS “On the Saturation Rule for the Stability of Queues.” **Journal of Applied Probability (J.A.P.)**, No. 32, pp. 494-507, 1995.
- [J45] F.B., B. GAUJAL, A. JEAN-MARIE et J. MAIRESSE, “Analysis of Parallel Processing Systems via the $(\max,+)$ Algebra”, in Quantitative Models in Parallel Systems, **Springer Verlag Basic Research Series**, pp. 220–236, 1995.
- [J44] F.B., W.A. MASSEY and P. WRIGHT, “Determining the Exit Time Distribution for a Closed Cyclic Jackson Network”, **Theoretical Computer Science (T.C.S.)**, Special Issue on Performance Evaluation, No 125, pp. 149–165, 1994.
- [J43] F.B. and S. FOSS, “Ergodicity of Jackson-type Queueing Networks”, **Queueing Systems (QUESTA)**, No. 17, pp. 5-72, 1994.
- [J42] F.B., M. KLEIN, M. LEBOURGES and S. ZUYEV, “Stochastic Geometry and Architecture of Communication Networks” *Selected Proceedings of the third INFORMS telecommunications conference*, et **Annales des Télécommunications**, 51, Vol 3-4, 1996.
- [J41] F.B., G. BALBO, R. BOUCHERIE, J. CAMPOS and G. CHIOLA, “Annotated Bibliography on Stochastic Petri Nets”, **CWI Tract 105**, pp. 1-24 (O.J. Boxma and G.M. Koole ed.), 1994.
- [J40] F.B., Z. LIU and D. TOWSLEY, “Optimal Scheduling of Parallel Processing Systems with Real Time Constraints”, **Journal of the Association for Computer Machinery (J.A.C.M.)**, No. 5, pp. 1209–1237, 1993.
- [J39] F.B., G. COHEN and B. GAUJAL, “Recursive Equations and Basic properties of Timed Petri Nets”, **Journal of Discrete Event Systems**, No. 1, pp. 415-439, 1992.
- [J38] F.B. and M. CANALES, “Parallel Simulation of Stochastic Petri Nets Using Recursive Equations”, **ACM Transactions on Modeling and Computer Simulation (TOMACS)**, No. 3(1), pp. 20–41, jan. 1993.
- [J37-bis] F. B., F.I. KARPELEVICH, M. Y. KELBERT, A.A. PUHALSKII, A.N. RYBKO and Y. M. SUHOV, “A mean Field Limit for a Class of Queueing Networks”, **Journal Statist. Physics** 66, No. 3-4, pp. 803-825, 1992.
- [J37] F.B. and T. KONSTANTOPOULOS, “Estimates of Cycle Times in Stochastic Petri Nets”, *Proceedings du Workshop Franco-Américain sur les Probabilités Appliquées*, Springer Verlag, **Lectures Notes in Control and Information Sciences**, No. 177, pp. 1-20, 1992.
- [J36] F.B. and Z. LIU, “Comparison Properties of Stochastic Decision Free Petri Nets”, **IEEE Trans. on Automatic Control**, Vol. 37, pp. 1905-1920, 1992.
- [J35] A. JEAN-MARIE and F.B., “Communication and Time Complexity of a Distributed Election Protocol”, Special Issue of **Queueing Systems (QUESTA)** sur les communications, No. 9, pp. 83–111, 1991.
- [J34] F.B. and A. MAKOWSKI, “Synchronization in Queueing Systems”, in the volume on **Stochastic Analysis of Computer and Communication Systems**, pp. 57-131, H. Takagi Edit., North Holland, 1990.
- [J33] F.B., N. BAMBOS, J. WALRAND, “Flow Analysis of Stochastic Marked Graphs”, *Proceedings C.D.C. 89*, Tampa, dec. 1989. **Probability in Engineering and Information Sciences**, No. 5 pp. 145–157, 1991.
- [J32] F.B., “Stochastic Ordering of Random Processes with an Imbedded Point Process”, **Journal of Applied Probability**, No. 28, pp. 553–567, 1991.
- [J31] F.B. and P. BREMAUD, “Virtual Customers in Sensitivity Analysis and Light Traffic Analysis via Campbell’s Formula for Point Processes”, **Advances in Applied Probability**, No. 25, pp. 221–234, 1993.

- [J30] F.B. and A. MAKOWSKI, “Exponential Martingales for Queues in a Random Environment, the M/GI/1 Case”, **Stochastic Processes and their Applications**, No. 38, pp. 99-133, 1991.
- [J29] T. KONSTANTOPOULOS and F.B., “On the Cutt-off Phenomenon in some Queueing Systems”, **Journal of Applied Probability**, No. 28, pp. 683-694, 1991.
- [J28] F.B., “Ergodic Theory of Stochastic Petri Networks”, Proceedings C.D.C. 89, Tampa, dec. 1989, **The Annals of Probability**, No. 20, pp. 375-396, 1992.
- [J27] F.B. and D. TOWSLEY, “ The Response Times in The Processor Sharing Queue are Associated”, **Queueing Systems (QUESTA)**, No. 7, pp. 269-282, 1990.
- [J26] F.B. and Z. LIU, “On a Class of Stochastic Evolution Equations”, **The Annals of Probability**, No. 20, 1992.
- [J25] D. TOWSLEY and F.B., “Comparison of Service Disciplines in a Tandem Queueing Network with Real Time Constraints”, **Operations Research Letters**, No. 10, pp. 49-55, 1991.
- [J24] F.B. and Z. LIU, “On the Execution of Parallel Programs on Multiprocessor Systems- A Queueing Theory Approach”, **Journal of the Association for Computer Machinery (J.A.C.M)**, Vol. 27 No. 32, pp. 373-414, apr. 1990
- [J23] F.B. and Z. LIU, “Architectures et performances des systèmes multiprocesseurs”, **Annales des Mines**, pp. 45-48, 1991.
- [J22] F.B. and Z. LIU, “Generalized Precedence Based Queueing Systems”. Actes du *Colloque C3*, Angoulême, oct. 1988, **Mathematics of Operations Research**, No. 17, pp. 615-639, 1992.
- [J21] F.B., E.G. COFFMAN and E. GILBERT, “ Tandem Conveyor Queues”, **Probability in Engineering and Informational Sciences**, Vol. 3 No. 4, pp. 517-536, 1989.
- [J20] F.B. and A. MAKOWSKI, “Dynamic, Transient and Stationary Behavior of the M/GI/1 Queue via Martingales”, **Annals of Probability** Vol. 17, No. 4, pp. 1691-1699, 1989.
- [J19] F.B. and Z. LIU, “Stability Condition of a Precedence Based Queueing Discipline”, **Advances in Applied Probability** Vol. 21, pp. 883-898, 1988.
- [J18] F.B. and W.A. MASSEY, ” A Sample Path Analysis of the M/M/1 Queue”, **Journal of Applied Probability**, Vol. 26, pp. 418-422, 1989.
- [J17] F.B. and A. MAKOWSKI, “ Queueing Models for Systems With Synchronization Constraints”, article invité, Special Issue of the **Proceedings of the IEEE** on discrete event systems, Y.C. Ho Ed., Vol. 77, No. 1, pp. 138-161, jan. 1989.
- [J16] F.B., W.A. MASSEY, A. TOWSLEY, ”Acyclic Fork Join Queueing Networks”, **Journal of the Association for Computing Machinery (J.A.C.M.)**, Vol. 36, No. 3, pp. 615-642, jul. 1989.
- [J15] F.B., A. MAKOWSKI and A. SHWARTZ, ”The Fork Join Queue and Related Systems with Synchronization Constraints: Stochastic Dominance, Approximations and Computable Bounds”, proceedings of the IFIP W-G 7.3, “Computer Networking and Performance Evaluation” seminar, sept. 85, Tokyo (North-Holland). **Advances in Applied Probability**, Vol. 21, No. 3, pp. 629-660, sept. 1989.
- [J14] F.B. and W.A. MASSEY, “A Transient Analysis of the Two-Node Series Jackson Network”. Rapport INRIA No. 852, jun. 1988, à paraître dans **Mathematics of Operations Research**.
- [J13] F.B. and A. MAKOWSKI, “Multi-dimensional Stochastic Ordering and Associated Random Variables”. **Operations Research**, Vol. 37, No. 3, pp. 478-487, jun. 1989.
- [J12] F.B., C. COURCOUBETIS and M. REIMAN, “Construction of the Stationary Regime of Queues with Locking”, **Stochastic Processes and their Applications**, Vol. 26, pp. 257, 265, 1987.

- [J11] F.B. and G. FAYOLLE, “Analysis of Models Reducible to a Class of Diffusion Processes in the Positive Quarter Plane”. **SIAM Journal on Applied Math.**, Vol. 47 No. 6, pp. 1367-1385, dec. 1987.
- [J10] F.B., “Exponential Martingales and Wald’s Formulas for Two Queue Networks”, the “Third ORSA/TIMS Special Interest Conference on Applied Probability”, Williamsburg, Virginia, jan. 1985, and **Journal of Applied Probability** No. 23, pp. 812-919, sept. 1986.
- [J9] F.B. and Ph. MUSSI, “A Parallel Interpreter for Arithmetic Expressions and its Evaluation”. Presented at Parallel Computing 84, Berlin. **IEEE Transactions on Computers**, Vol. C35 No. 3, pp. 245-256, mar. 1986.
- [J8] F.B. and A. MAKOWSKI, “Queues in Random Environment : Stability and Bounds”, **Stochastic Models**, Vol. 2, No. 2, M. Dekker, 1986.
- [J7] F.B. and K.S. TRIVEDI, “A Single Server Queue in a Hard Real Time Environment”, **Operations Research Letters**, Vol. 4, No. 4, pp. 161-168, dec. 1985.
- [J6] F.B. and A. MAKOWSKI, “Direct Martingale Arguments for Stability : The M/G/1 Case”. apr. 1985. **Systems & Control Letters** No. 6, pp. 181-186, North Holland, aug. 1985.
- [J5] F.B., P. BOYER and G. HEBUTERNE, “Single Server Queues with Impatient Customers”, **Advances in Applied Probability** No. 16, pp. 887-905, dec. 1984.
- [J4] F.B., E. GELENBE and B. PLATEAU, “An End to End Approach to the Resequencing Problem”, **Journal of the Association for Computing Machinery, (J.A.C.M.)** Vol. 31, No. 3, pp. 474-485, jul. 1984.
- [J3] F.B. and E.G. COFFMAN, “A Data Base Replication Analysis Using an M/M/m Queue with Service Interruptions”. **Performance Evaluation Review** No. 11, 4, pp. 102-107, 1982.
- [J2] F.B. and T. FLEURY, “Parsing Arithmetic Expressions in a Multiprocessing Environment”. **Acta Informatica** No. 17, pp. 287-310, Springer Verlag, 1982.
- [J1] F.B., “Analysis of a Service Facility with Periodic Checkpointing”, **Acta Informatica** No. 15, pp. 67-81, 1981.

Publications in International Conferences, not Published in Journals

- [C53] F.B., B. Blaszczyzyn and C. SINGH, “Analysis of a Proportionally Fair and Locally Adaptive spatial Aloha in Poisson Networks”. Proceedings of **IEEE Infocom 2014**, Toronto, Canada, May 2014.
- [C52] F.B. and C. SINGH, “Adaptive spatial aloha, fairness and stochastic geometry”, Proceedings of **IEEE WiOpt 2013**, pp. 7-14, Tsukuba, Japan, 2013, CoRR abs/1303.1354, May 2013.
- [C51] F.B., F. MATHIEU, I. NORROS and R. VARLOOT, “Can P2P Networks be Super-Scalable?”, Proceedings of **IEEE INFOCOM 2013**, Torino, Italy, April 2013.
- [C50] T.V. NGUYEN, F.B., K. ZHU, S. SUBRAMANIAN and X. WU. “A performance analysis of CSMA based broadcast protocol in VANETs”. Proceedings of **IEEE INFOCOM 2013**: pp. 2805-2813. Torino, Italy, April 2013.
- [C49] T.V. NGUYEN and F.B., “On the spatial modeling of wireless networks by random packing models” Proceedings of **IEEE INFOCOM 2012**, pp. 28-36, Orlando, Fl., USA, March 2012.
- [C48] F.B. and J. BOLOT, “Modeling the Economic Value of the Location Data of Mobile Users”, Proceedings of **IEEE INFOCOM 2011**, pp. 1467-1475, Shanghai, April 2011.

- [C47] H.S. DHILLON, R. GANTI, F.B. and J.G. ANDREWS, “Modeling and Analysis of K-Tier Downlink Heterogeneous Cellular Networks”, Proceedings of the **Allerton Conference**, 2011.
- [C46] C. S. CHEN, F.B. and L. ROULLET, “Joint optimization of radio resources in small and macro cell networks”, Proceedings of **IEEE VTC’11**, pp. 1-5, 2011.
- [C45] R.K. GANTI, F.B. and J.G. ANDREWS, “A New Way of Computing Rate in Cellular Networks”, Proceedings of **IEEE ICC**, pp. 1-5, 2011.
- [C44] F.B. and B. BLASZCZYSZYN, “A New Phase Transition for Local Delays in MANETs”, Proceedings of **IEEE INFOCOM 2010**, San Diego, March 2010.
- [C43] F. MORLOT, F.B. and S. ELAYOUBI, “An Interaction-Based Mobility Model for Dynamic Hot Spot Analysis”, Proceedings of **IEEE INFOCOM 2010**, San Diego, March 2010.
- [C42] H. ZANG, F.B. and J. BOLOT, “Bayesian Inference for Localization in Cellular Networks”, Proceedings of **IEEE INFOCOM 2010**, San Diego, March 2010.
- [C41] T.V. NGUYEN and F.B., “A Probabilistic Model of Carrier Sensing Based Cognitive Radio”, Proceedings of **IEEE Symposium Dynamic Spectrum Access Networks, DYSPAN’10**, Singapore, Apr. 2010.
- [C40] C.S. CHEN and F.B., “Self-Optimization in Mobile Cellular Networks: Power Control and User Association”, Proceedings **IEEE ICC’10**, Cape Town, South Africa, May 2010.
- [C39] F.B., G. Carofiglio and M. Piancino, “On Scalable TCP”, Proceedings of **IEEE INFOCOM’09**, Rio de Janeiro, Brazil 2009.
- [C38] F.B., B. BLASZCZYSZYN and P. MUHLETHALER, “On the performance of time-space opportunistic routing in multihop Mobile Ad Hoc Networks”, Proceedings of **IEEE WiOpt**, Berlin, April 2008.
- [C37] F.B., B. BLASZCZYSZYN, E. ERMEL and P. MUHLETHALER, “An optimized relay self selection technique for opportunistic routing in mobile ad hoc networks”, Proceedings of the **IEEE European Wireless Conference**, Prague, June 2008.
- [C36] V. ANANTHARAM and F.B., “A Palm theory approach to error exponents”, Proceedings of **IEEE Symposium on Information Theory**, Toronto, Canada, July 2008.
- [C35] F.B., S. MACHIRAJU, D. VEITCH and J. BOLOT, “On Optimal Probing for Delay and Loss Measurement”, Proceedings **2007 ACM SIGCOMM Internet Measurement Conference**, San Diego, California, Pages 291–302, October 2007.
- [C34] H.Q. NGUYEN, F.B. and D. KOFMAN, “A Stochastic Geometry Analysis of Dense IEEE 802.11 Networks” Proceedings **IEEE INFOCOM’07**, Anchorage, Page(s): 1199 - 1207 May 2007.
- [C33] V. MHATRE, K. PAPAGIANNAKI and F.B., “Interference Mitigation Through Power Control in High Density 802.11 WLANs Proceedings **IEEE INFOCOM’07**, Anchorage, Page(s): 535 - 543 May 2007.
- [C32] B. KAUFFMANN, F.B., A. CHAINTREAU, V. MHATRE, K. PAPAGIANNAKI and C. DIOT, “Measurement-Based Self Organization of Interfering 802.11 Wireless Access Networks” Proceedings **IEEE INFOCOM’07**, Anchorage, Page(s):1451 - 1459, May 2007.
- [C31] F.B. and McDONALD, D., “Mellin Transforms for TCP Throughput with Applications to Cross Layer Optimization”, Proceedings of **CISS’06**, Princeton University, March 2006.
- [C30] F.B., S. MACHIRAJU, D. VEITCH and J. BOLOT “The Role of PASTA in Network Measurement” Proceedings of **ACM SIGCOMM’06**, Pisa, October 2006.
- [C29] F.B., N. BAMBOS et C. CHAN. “Optimal Throughput and Routing for Wireless Link Arrays”. Proceedings of **IEEE INFOCOM’06**, Barcelona, March 2006.

- [C28] S. MACHIRAJU, D. VEITCH, F.B., A. NUCCI and J. BOLOT, “Theory and Practice of Cross-Traffic Estimation”, Proceedings of **ACM SIGMETRICS’05**, Banff, Canada, June 2005.
- [C27] F.B., K.B. KIM and D. DE VLEESCHAUWER, “Analysis of the Competition between Wired, DSL and Wireless Users in an Access Network”, Proceedings of **IEEE INFOCOM’05** Miami, March 2005.
- [C26] F.B., B. BLASZCZYSZYN et M. KARRAY, “Blocking Rates in Large CDMA Networks via a Spatial Erlang Formula”, Proceedings of **IEEE INFOCOM’05** Miami, March 2005.
- [C25] F.B., A. CHAINTREAU, Z. LIU, S. SAHU and A. RIABOV, “The One to Many TCP Overlays”, Proceedings of **IEEE INFOCOM’05** Miami, March 2005.
- [C24] F.B. and K.B. KIM, “TCP Throughput Analysis under Transmission Error and Congestion Losses”, Proceedings of **IEEE INFOCOM’04** Hong Kong, March 2004.
- [C23] D. HONG, P. POPPE, J. REYNIER, F.B., G. PETIT, “The Impact of Burstification on TCP Throughput in Optical Burst Switching Networks, Proceedings of **ITC’03**, Berlin, Sept. 03.
- [C22] F.B., A. CHAINTREAU and Z. LIU, “An Analysis of Overlay Multicast Communication via First Passage Percolation”, Proceedings of **MTNS’04**, Louvain, Belgium, July 04.
- [C21] F.B., A. CHAINTREAU, Z. LIU, S. SAHU and A. RIABOV, “Scalability of Reliable Group Communication Using Overlays”, Proceedings of **IEEE INFOCOM’04** Hong Kong, March 2004.
- [C20] F.B. and D. HONG, “Flow Level Simulation of Large IP Networks”, Proceedings of **IEEE INFOCOM’03** San Francisco, Apr. 2003.
- [C19] F.B., B. BLASZCZYSZYN and F. TOURNOIS, “Downlink Capacity and Admission - Congestion Control in CDMA Networks”, Proceedings of **IEEE INFOCOM’03**, San Francisco, Apr. 03.
- [C18] F.B. and S. HAAR, “Counter Equations for Timed Competition Nets”. Proceedings of the *Workshop on Max-plus Algebras and Their Applications to Discrete-event Systems, Theoretical Computer Science, and Optimization*, **1st IFAC Symposium on System Structure and Control**, aug. 2001, Prague.
- [C17] F.B., D. HONG and Z. LIU, “Fixed Point Methods for the Simulation of a Large Number of Interacting TCP Connections.” Proceedings of the **ITC Specialists Seminar on Access Networks and Systems**, Girona, pp. 233-244, 2001.
- [C16] F.B. and D. HONG, “A.I.M.D, Fairness and Fractal Scaling of TCP Traffic”. Proceedings of **IEEE INFOCOM’02**, NY, jun. 2002.
- [C15] F.B., D. KOFMAN and J.L. ROUGIER, “Self Organizing Hierarchical Multicast Trees and their Optimization”, Proceedings of **IEEE INFOCOM’99**, New York.
- [C14] F.B. and D. HONG, “The AIMD Model for TCP Sessions Sharing a Common Router”, Proceedings of the **39th Annual Allerton Conf. on Communication, Control and Computing**, Allerton Illinois, 2001.
- [C13] F.B. and D. HONG, “TCP is max-plus Linear”, Proceedings of **ACM SIGCOMM’00**, Stockholm, Vol. 30, No. 4, pp. 219-230, sept. 2000.
- [C12] F.B., S. GAUBERT and D. HONG, “Representation and Expansion of Max-Plus Lyapunov Exponents”, Proceedings of the **37th Annual Allerton Conf. on Communication, Control and Computing**, Allerton Illinois, 1999.
- [C11] F.B., S. SCHLEGEL and V. SCHMIDT, “Asymptotics of Tandem Queues with Subexponential Service Times”, Proceedings of the **Workshop on Stochastic Modeling of High Speed Networks**, Technical University, Munich, 1998.

- [C10] E. ALTMAN, F.B. and J. BOLOT, “Discrete-time Analysis of Adaptive Rate Control Mechanisms”, Proceedings **5th international conference on High Speed Networks**, pp. 121–140. North Holland, 1994.
- [C9] F.B., N. FURMENTO and B. GAUJAL, “Parallel and Distributed Simulation of Free Choice Petri Nets”, Proc. Ninth Workshop on Parallel and Distributed Systems, Parallel and Distributed Simulation **PADS’95**, Lake Placid, 1995.
- [C8] F.B., “A Queueing Model of Timestamp Ordering in a Distributed System”. Proceedings of **Performance’87**, Bruxelles, dec. 1987, pp. 411-431, North Holland.
- [C7] F.B. and W.A. MASSEY, “On the Busy Period of Certain Classes of Queueing Networks”. Invited paper, **2nd International Workshop on Applied Mathematics**, University of Rome 2, apr. 1987, pp. 3-11, North Holland.
- [C6] F.B., “Queues with Locking ; the Multiclass Problem”. Invited paper, **International Seminar on Teletraffic Analysis and Computer Performance Evaluation**, Amsterdam, pp. 359-373, jun. 86, North Holland.
- [C5] F.B. and A. MAKOWSKI, “Simple Computable Bounds for the Fork Join Queue”. Proceedings of the **Johns Hopkins Conference on Information Science and Systems**, pp. 436-441, Johns Hopkins University, mar. 1985.
- [C4] F.B. and Ph. ROBERT, “Analysis of Update Response Times in a Distributed Data Base Maintained by the Conservative Time Stamps Ordering Algorithm”, Proceedings of **Performance’83** (9th International Conference on Comp., Perf. Model), College Park, Maryland, pp. 415-436, may 1983, North Holland.
- [C3] F.B. and K.S. TRIVEDI, “Analysis of M/G/2 Standby Redundant System”, Proceedings of **Performance’83**, College Park, Maryland, pp. 457-476, may 1983, North Holland.
- [C2] F.B. and T. ZNATI, “Queueing Systems with Breakdowns in Data Base Modeling”, Proceedings of **Performance’81** (8th IFIP International Symposium on Comp. Perf. Model.), Amsterdam, pp. 213-232, nov. 1981, North Holland.
- [C1] F.B. and G. HEBUTERNE, “On Queues with Impatient Customers”, Proceedings of **Performance’81**, Amsterdam, pp. 159,180, nov. 1981, North Holland.