

Ali Süleyman ÜSTÜNEL

Date and place of birth: July 13th, 1950 . Iznik (Turkey)

Present professional position: Professor

Professional address: Ecole Nationale Supérieure de
Télécommunications (ENST),

46 rue Barrault, 75634 Paris Cedex 13, France.

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Personal address: 189 rue de Tolbiac, 75013 Paris, France.

Nationality: French

LANGUAGES:

French, English, Turkish, German

UNIVERSITY DEGREES

- Doctorat d'Etat ès Mathématiques
- Doctorat de 3ème cycle ès Mathématiques
- Master of Sciences in Mathematics
- Bachelor of Sciences in Physics

MEMBERSHIP

- American Mathematical Society
- Société Mathématique Française
- Who's Who in the World

RESEARCH FIELDS

- Monge-Kantorovitch and Monge problem in infinite dimensional spaces, Monge-Ampère equation on the Wiener space, their applications and relations with the stochastic analysis on the Wiener space.
- Functional analysis on Wiener space: Sobolev analysis and applications to quantum field theory,
- Analysis and probability on loop groups,
- Degree theory on Wiener space and the change of variables w.r. to the Wiener measure, applications to non-linear stochastic partial differential equations,
- Stochastic processes and their applications: stochastic control theory and filtering, financial mathematics,
- Stochastic calculus on nuclear spaces, applications to stochastic partial differential equations, filtering and prediction,

- Queueing theory and applications to communication systems.

SUBJECTS OF SUPERVISED THESES

- Weak convergence of stochastic processes on nuclear spaces.
- Large deviations for communication networks.
- Law of large numbers for the distributions on the Wiener space.
- Perturbation methods for the queueing networks (1994).
- Stochastic calculus of variations for the Poisson measures.

ORGANIZATION OF INTERNATIONAL MEETINGS and PROCEEDINGS

- Stochastic Analysis and Related Topics I, Silivri Meeting. Lecture Notes in Math. Vol. 1316. Springer, 1988.
- Stochastic Analysis and Related Topics II, Silivri Meeting. Lecture Notes in Math. Vol. 1444. Springer, 1990.
- Stochastic Analysis and Related Topics III, Silivri Meeting. Progress in Probability, Vol.31. Birkhauser, 1992.
- Stochastic Analysis and Related Topics VI, Oslo-Silivri Meeting. Stochastic Monographs, Vol. 8. Gordon and Breach, 1993.
- Stochastic Analysis and Related Topics V, Oslo-Silivri Meeting. Progress in Probability, Vol.38. Birkhauser, 1996.
- Stochastic Analysis and Related Topics V, Oslo-Silivri Meeting. Progress in Probability, Vol.48. Birkhauser, 2000.

REFEREEING FOR JOURNALS

- Annals of Probability,
- Comptes Rendus de l'Académie de Sciences de Paris,
- Stochastics and Stochastic Reports,
- Annales de l'Institut Henri Poincaré,
- Probability Theory and Related Fields,
- Reviews of American Mathematical Society,
- Bulletin of the American Mathematical Society

SABBATICAL LEAVES

University of Oslo, Institut of Mathematics, June-October 1993.

PROFESSIONAL ACTIVITIES

2005-2007: Professeur at Ecole Nationale Supérieure de Télécommunications (ENST), Paris. Organization and teaching of the courses of Advanced Probability, a third year course on Stochastic Processes with applications to financial mathematics and a graduate course on the Malliavin Calculus. Invited speaker to different meetings like Bernoulli meeting (July 2006), Skorokhod's Conference, Lisbon and Technion Seminars.

2001-2004: Professeur at Ecole Nationale Supérieure de Télécommunications (ENST), Paris. Organization and teaching of the first year course of Probability, a third year course on Stochastic Processes with applications to financial mathematics. Invited speaker to Stochastic Analysis Meeting of Kyoto for the 88th birthday of Professor Kiyosi Itô (2002).

1995-2001: Professeur at Ecole Nationale Supérieure de Télécommunications (ENST), Paris. Organization and teaching of the first year course of Probability, a second year course on Stochastic Processes with applications to telecommunications and a course on the Ito calculus with applications to financial mathematics. Invited professor to Technion-Israel Institute of Technology, University of Barcelona, University of Lisbon, Warwick University. Organization of Oslo-Silivri Workshops on Stochastic Analysis for the years 1996, 1998 and 2000. Several conferences in different meetings.

1994-1995: Professeur at Ecole Nationale Supérieure de Télécommunications (ENST), Paris. Organization and teaching of the first year course of Probability, a second year course on Stochastic Processes with applications to telecommunications. Invited professor to Technion-Israel Institute of Technology, to Physics and Mathematics Institute of Lisbon, to the University of Barcelona and to the Mathematics Institute of Guanajuato (Mexico). Reporter for the tenure positions of Technion and the University of Oslo.

1993-1994: Professeur at Ecole Nationale Supérieure de Télécommunications (ENST), Paris. Organization and teaching of the first year course of Probability, a second year course on Stochastic Processes with applications to telecommunications. Co-organizer of the 5th Silivri Workshop on Stochastic Analysis in collaboration with Professor B. Oksendal. Supervision of the Ph. D. Thesis of L. Decreusfond.

1992-1993: Professeur at Ecole Nationale Supérieure de Télécommunications (ENST), Paris. Organization and teaching of the first year course of Probability, a second year course on Stochastic Processes with applications to telecommunications. Graduate course on Functional Analysis on the Wiener Space in University of Paris VI. Invited professor at the University of Oslo (Norway) during May-October 93. Invited speaker to Summer school on Stochastic Analysis at Cornell University and to the Stochastic Analysis Conference at Locarno (organized by ETH of Zurich).

1991-1992: Professor at Ecole Nationale Supérieure de Télécommunications (ENST), Paris. Graduate course “The Malliavin Calculus” at the l’Université de Paris VI. Organisation of Workshop on Stochastic Analysis of Oslo-Silivri in collaboration with B. Oksendal. Invited professor to Technion, Israel Institute of Technology (collaboration with Professor M. Zakai), to the University of Barcelona (collaboration with Professor D. Nualart), invited speaker to “Journées des Equations aux Dérivées Partielles Stochastiques” at Luminy, to the conference of Montréal about the Superprocesses and interacting particle systems, to the conference of Guanajuato about the multiple Wiener integrals and their applications.

1990-1991: Professor at Ecole Nationale Supérieure de Télécommunications (ENST), Paris. Invited professor to Technion (M. Zakai), . Invited speaker at the seminars of University of Paris VI, Ecole Polytechnique. Organisation of weekly seminars on Stochastic Analysis with Professor Paul Malliavin at ENST. Supervision of the Ph.D Thesis of N. Privault.

1989-1990: Professor at Ecole Nationale Supérieure de Télécommunications (ENST), Paris. Professor at Ecole Nationale des Ponts et Chaussées (part time).

Invited professor to Technion-Israel Institute of Technology for research with M. Zakai about the Girsanov transformation for the anticipative shifts. Supervision of the Ph.D Thesis of N. Privault.

Organisation of the Probability course (1st year) at ENST, supervision of the thesis of T.Choukri, N.Privault and C.Martias respectively on queueing networks, stochastic calculus of variations for the Poisson random fields (Calcul de Malliavin), and Stochastic Analysis on Nuclear Spaces and distributions on the Wiener space. Invited speaker by the Polish Academy of Sciences for the Stochastic Analysis Semester , co-organisation of the third Silivri Workshop on Stochastic Analysis, organisation of Seminars on Stochastic Analysis at ENST.

1988-1989: Organisation of the Probability course (1st year) at ENST, part time professor of probability at ENPC (Ecole Nationale des Ponts et Chaussées). Invited professor to Technion-Israel Institute of Technology for scientific research.

Invited professor to University of Vancouver, B.C., to the University of North Carolina at Chapel Hill and at Charlotte, to Technion (Israel), to the University of Twente (Holland), Rutgers and Cornell universities. Invited speaker to the Conference of Oberwolfach(RFA) on Stochastic Analysis, Conference on Stochastic Partial Differential Equations of Trento(Italy)

Supervision of the Ph. D. thesis of T.Choukri and C.Martias.

Organisation of the Seminar on Stochastic Systems at ENST and participation to several seminars at Paris.

1987-1988: Professor at ENST, Paris, part time professor of probability at ENPC. Organization of courses of Probability and queueing theory in both establishments

Invited professor to Technion (joint research with Prof. M. Zakai), to Barcelona (Joint research with Prof.D. Nualart), to Bilkent University (Ankara, Turkey).

Organisation of weekly seminars on Stochastic Analysis, Malliavin Calculus and queueing theory.

Supervision of the thesi of C.Martias T .Choukri on respectively: stochastic calculus of variations on nuclear spaces and application of large deviations to network performance evaluation.

Invited speaker t the conferences at Ecole Normale Supérieure (ENS), Ecole polytechnique, University of Paris VI. Invited speaker at the conference on Stochastic Partial Differential Equations of Trento (Italy), Strasbourg Seminar, Oberwolfach at 88 and 89 for Stochastic Partial Differential Equations meetings.

1986-1987: Researcher at Centre National d'Etudes de Télécommunications (CNET), part-time professor of Probability at ENPC.

Invited researcher at IMA (Institute of Mathematics and Applications, USA), invited speaker at Urbana-Champaign (USA), University of Lincoln, Courant Institute of Mathematical Sciences (New York). Seminars given at Ecole Normale Supérieure de Paris, Ecole Polytechnique, au Séminaire de Probabilités of Strasbourg and the University of Paris VI.

Supervision of thesis d'Etat of C.Martias and J.P.Fouque (the latter is about the convergence in law of nuclear space-valued stochastic processes).

Part time professor of queueing theory at Institut National de Télécommunications. Coorganisateur of Silivri (Istanbul) Workshop on "Stochastic Analysis and Related Topics".

1985-1986: Researcher at CNET, part-time professor of Probability at ENPC, part time professor of queueing theory at Institut National de Télécommunications .

Invited professor at the University of Carolina at Chapel Hill and University of Bremen (Germany).

Invited speaker at the University of Texas (Austin), Courant Institute of Mathematical Sciences (New York).

Applied research on the telephone traffic prediction of France, computer implementation of the numerical analysis methods, called Telepak, for the telecommunication performance evaluations.

1982-1985: Researcher at CNET, part-time professor of Probability at ENPC, part time professor of queueing theory at Institut National de Télécommunications

Invited speaker to several meetings and conferences about filtering, stochastic control, stochastic partial differential equations (Trento, Rome, Marseille, Strasbourg, Paris, Bremen and Algarve for Advanced Studies Institute of NATO, etc.).

1981-1982: Researcher at CNET. Completion of Doctorat d'Etat ès Mathématiques at the University of Paris VI l'Université at June , 17 th, 1981 with the degree “ très honorable” (the thesis was evaluated by **Laurent Schwartz**).

1978-1981: Maître assistant en Mathématiques at the University of Poitiers. Teaching of second year algebra, third year probability and preparation of the candidates for the examination of “ agrégation” in mathematics.

1977-1978:Assistant in the dept. of mathematics at the University of Poitiers.

Thesis of “troisième cycle” in mathematics at the University of Paris VI.

1974-1977:Ph. D student at the University of Paris VI.

1971-1974: Assistant at METU (Middle East Technical University, Ankara, Turkey) in mathematics dept. Master of Sciences in mathematics.

1967-1971: B. Sc in Physics at METU.

1964-1967: Student at Ankara Fen Lisesi.

Publications

1. “ Méthodes de pénalisation en contrôle stochastique ”. Comptes Rendus de l'Académie des Sciences (CRAS), t. 286, Série A, p. 335–338(**1978**).
2. “ La formule de Feynman–Kac stochastique ”. CRAS, t. 292, Série A, p. 595–597(**1981**).

3. “ Construction of branching diffusion processes and their optimal stochastic control ”. Journal of Appl. Math. and Optimization, Vol. 7, p. 11–33 (**1981**).
4. “ A characterization of semimartingales on nuclear spaces ”. Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete, Vol. 60, p.21–39 (**1982**).
5. “ Stochastic integration on nuclear spaces and its applications ”. Annales de l’Institut Henri Poincaré , Vol. 18, p. 165–200(**1982**).
6. “ Some applications of stochastic integration in infinite dimension ”. Stochastics, Vol. 7, p. 255–288(**1982**).
7. “ A generalization of Itô’s formula ”. Journal of Functional Analysis, Vol. 47 , p. 143–152(**1982**).
8. “ Stochastic Feynman–Kac formula ”. Jour. d’Analyse Mathématique, Vol. 42, p. 155–165(**1983**).
9. “ Analytic semimartingales and their boundary values ”. Jour. of Functional Analysis Vol. 51, p. 142–158(**1983**).
10. “ Some applications of stochastic calculus on the nuclear spaces to the nonlinear stochastic problems ”. In Nonlinear Stochastic Problems. Edited by R. S. Bucy and J. M. F. Moura, NATO Advanced Studies Institute Series. D. Reidel Publishing Company, **1983**.
11. “ Distributions–valued semimartingales and applications to control and filtering ”. Lecture Notes in Control and Inf. Sci. Vol. 61, p.314–325 (**1983**). Eds. H. Korezlioglu and G. Mazziotto. Springer–Verlag.
12. “ Additive processes on nuclear spaces ”. Annals of Probability, Vol. 12, p. 858–868(**1984**).
13. “ On the hypoellipticity of the stochastic partial differential operators ”. In the Proceedings of the IFIP–WG 7/1 Working Conference, L. N. in Control and Inf. Sc. , Vol. 69. Springer, **1985**.
14. “ Stochastic analysis on nuclear spaces and its applications ”. In Stochastic Space–Time Models and Limit Theorems, p. 163–177. Reidel Publ. Co. **1985**, Edited by L. Arnold and P. Kotelenez.
15. “ Une extension du calcul d’Itô via le calcul des variations stochastiques ”. CRAS, Vol. 300, Série I, p.277–279(**1985**).
16. “ Applications of integration by parts formula for infinite dimensional semimartingales ”. Jour. Multivariate Anal. Vol. 18, p. 287–300(**1986**).
17. “ Formule de changement de variable pour l’intégrale anticipante de Skorohod ”. CRAS, t. 303, Série I, p. 329–331(**1986**).

18. (with H. Korezlioglu) “ Une formule d’Itô sur l’espace de Wiener abstrait ”. CRAS, t. 303, Série I, p. 244–249(**1986**).
19. “ Some applications of the Malliavin Calculus to Stochastic Analysis ”. In the Proceedings of Trento, L. N. in Math. Vol. 1236, p. 230–238. Springer, **1987**.
20. “ Representation of the distributions on Wiener space and stochastic calculus of variations ”. Journal of Functional Analysis, Vol. 70, p. 126–139(**1987**).
21. “ Construction du calcul stochastique sur l’espace de Wiener abstrait ”. CRAS, t. 305, Série I, p. 279–282(**1987**).
22. (with M. Zakai) “ Caractérisation géométrique de l’indépendance sur l’espace de Wiener ”. CRAS, t. 306, Série I, p. 199–201(**1988**).
23. (with M. Zakai) “ Caractérisation géométrique de l’indépendance forte sur l’espace de Wiener ”. CRAS, Série 1, tome 306, p. 486–489 (**1988**).
24. “ Extension of the Itô Calculus via the Malliavin Calculus ”. Stochastics, Vol. 23, p. 353–375 (**1988**).
25. “ Some comments on the filtering of diffusions and the Malliavin Calculus ”. Proceedings of Silivri Workshop on Stochastic Analysis. L. N. in Math. Springer Vol. 1316, Eds. H. Korezlioglu and A. S. Ustunel, **1988**.
26. “ The Itô formula for anticipative processes with nonmonotonous time scale via the Malliavin Calculus ”. Theory of Probability and Related Fields, Vol. 79, p. 249–269(**1988**).
27. (with M. Zakai et D. Nualart) “ On the moments of a multiple Wiener–Itô integral and the space induced by the polynomials of the integral ”. Stochastics, Vol. 25, p. 233–240(**1988**).
28. (with M. Zakai) “ On independence and conditioning on Wiener space ”. Annals of Probability, Vol. 17, p. 1441–1453(**1989**).
29. (with D. Nualart) “ Les distributions positives et les mesures cylindriques sur l’espace de Wiener ”. In SPDE and Applications, L. N. in Math., vol. 1390, p. 186–192, **1989**.
30. (with D. Nualart) “ Une extension du laplacien sur l’espace de Wiener et la formule d’Ito associée ”. CRAS de Paris, t. 309, p. 383–386, **1989**.
31. (with Korezlioglu) “ Construction de distributions sur l’espace de Wiener via la seconde quantification ”. CRAS de Paris, t. 309, p. 781–784, **1989**.
32. (with Korezlioglu) “ Distributions, Girsanov and degree theorems on Wiener spaces ”. Proceedings on White Noise Analysis, Mathematics and Applications, Bielefeld, July **1989**, World Scientific Publications Co.

33. (with M. Zakai)“ The analysis of independence on the Wiener space ”. Journal of Functional Analysis, Vol. 90, p. 113–138 (**1990**).
34. (with D. Nualart and M. Zakai)“ Some remarks on independence and conditioning on Wiener space ”. Proceedings of Second Silivri Meeting. Lecture Notes in Mathematics, vol 1444, p. 122, **1990**.
35. (with T. Choukri)“ Diffusion approximation of videoconference networks ”. Queueing Systems, 6, p. 405–424 (**1990**).
36. (with D. Nualart and M. Zakai)“ Some relations among classes of sigma–fields on Wiener space ”. Proba. Th. Rel. Fields, Vol. 85, p. 119–131 (**1990**).
37. (with Korezlioglu)“ A new class of Distributions on Wiener Spaces ”. Second Silivri Meeting on Stochastic Analysis. L. N. in Math. Vol. 1444, p. 106–122. Springer (**1990**).
38. “ Hypoellipticity of Stochastic partial differential operators ”. Stochastic Analysis and Applications , Vol. 9, p. 99–113 (**1991**).
39. “ The Explicit Representation of the Local Times of Anticipative Processes ”. Stochastics and Stochastic Reports 36, 65–69 (**1991**).
40. (with D. Nualart) “ Geometric analysis of conditional independence on Wiener space ”. Proba. Th. Rel. Fields 89, 407–422 (**1991**).
41. (with Zakai) “ Une approche variationnelle pour la formule de Cameron–Martin–Girsanov–Maruyama–Ramer ”. CRAS, Série I, t. 312, p. 619–623, **1991**.
42. (with M. Pontier)“ Analyse stochastique sur l’espace de Lie–Wiener ”. CRAS, Série I, **1991**.
43. “ A new class of stochastic partial differential equations on the Wiener space ”. Stochastic Partial Differential Equations and Applications, Pitman Research Notes in Mathematics Series, Vol. 268, p.282–286 (**1992**).
44. (with M. Zakai)“ Transformation of the Wiener Measure under the Anticipative Flows ”. Probab. Theory Relat. Fields 93, 91–136 (**1992**).
45. (with G. Kallianpur)“ Distributions, Feynman Integrals and Measures on Abstract Wiener Spaces ”. Stochastic Analysis and Related Topics, Progress in Probability, Vol. 31, p.237–284. Birkhauser **1992**, Boston–Basel–Berlin.
46. “ L’intégrabilité exponentielle de fonctionnelles de Wiener ”. CRAS, t.315,Série I, p. 997–1000 (**1992**).
47. (with M. Zakai)“ The Wiener Chaos Expansion of Certain Radon–Nikodym Derivatives ”. Stochastic Analysis and Related Topics,Progress in Probability, Vol. 31, p.364–369. Birkhauser **1992**, Boston–Basel–Berlin.

48. (with M. Zakai) “ Applications of the Degree Theorem to Absolute Continuity on Wiener Space ”. *Probab. Theory and Relat. Fields*, Vol.95, p.509–520 (**1993**).
49. (with Y. Hu and L. Decreasefond) “ Une inégalité d’interpolation sur l’espace de Wiener ”. *C. R. Acad. Sci. Paris*, t. 317, Série I, p. 1065–1067, **1993**.
50. (with M. Zakai) “ Calcul de densité de Radon–Nikodym sur l’espace de Wiener ”. *CRAS de Paris*, Série I, Vol. 317, p. 883–886, **1993**.
51. (with C. Houdré and V.-P. Abreu) “ Multiple Ito–Wiener integrals and their applications ”, in *Chaos Expansions, Multiple Wiener–Ito Integrals and Their Applications*. C. Houdré and V. Pérez-Abreu (Eds.). CRC, Probability and Stochastics Series, p.1–30, CRC Press, **1994**.
52. (with M. Zakai) “ Composition of Non Absolutely Continuous Shifts with Wiener Functionals ”. *Prob. Th. and Related Fields*, 98, p.163–184 (**1994**).
53. “ Exponential tightness of Wiener functionals ”. In the *Proceedings of Oslo–Silivri Conference on Stochastic Analysis and Related Topics*, p. 265–275. *Stochastic Monographs*, Vol. 8, Gordon and Breach **1994**.
54. (with M. Zakai) “ Transformation of the Wiener measure under non–invertible shifts ”. *Prob. Th. and Related Fields*, Vol. 99, p. 485–500 (**1994**).
55. (with M. Zakai) “ Analyse de rotations aléatoires sur l’espace de Wiener ”. *CRAS*, Vol.319, Série I, p. 1069–1073 (**1994**).
56. *An Introduction to Analysis on Wiener Space*. *Lecture Notes in Mathematics*, vol.1610. Springer, **1995**.
57. (with L. Decreasefond) “ The Benes equation and stochastic calculus of variations ”. *Stochastic Processes and Their Applications*, Vol. 57, p.273–284, **1995**.
58. (with M. Zakai) “ Random Rotations of the Wiener path ”. *Probability Theory and Related Fields*, Vol.103, p. 409–430 (**1995**).
59. (with M. Zakai) “ Absolute continuity on the Wiener space and some applications ”. *Proceedings of Symposia in Pure Mathematics*, Volume 57, p.487–494 (**1995**).
60. (with M. Zakai) “ Absolute continuity of monotone shifts on the Wiener space ”. In *Proceedings of fifth Oslo–Silivri Workshop*, p. 269–281. *Progress in Probability*, Vol.38. Birkhäuser, **1995**.
61. (with L. Decreasefond) “ Application du calcul des variations stochastiques au mouvement brownien fractionnaire ”. *CRAS*, vol. 321, Série I, p.1605–1608 (**1995**).
62. “ Some exponential moment inequalities for the Wiener functionals ”. *Journal of Functional Analysis*, Vol.136, p. 154–170 (**1996**).

63. (with M. Zakai) “ Measures induced on Wiener space by monotone shifts ”. *Proba. Th. Relat. Fields*, vol.105, p. 545–563 (**1996**).
64. (with M. Zakai) “ Extension of Lipschitz functions on Wiener space ”. *Stochastic Analysis and Applications*, Proc. of 5th Gregynog Symp., p. 465–470. World Scientific, **1996**.
65. (with A. Badrikian) “ Radonification of cylindrical semimartingales on Hilbert spaces ”. *Ann. Math. Blaise Pascal*, vol.3, p. 13–21 (**1996**).
66. (with M. Zakai) “ The Construction of Filtrations on the Wiener Space ”. *Journal of Functional Analysis*, Vol. 143, p. 10–32 (**1997**).
67. (with M. Zakai) “ The change of variables formula on Wiener space ”. *Séminaire de Probabilités XXXI*, p.24–39 (**1997**).
68. (with M. Zakai) “ Degree theory on Wiener space ”. *Proba. Th. and Related Fields*, vol. 108, p.259–279 (**1997**).
69. (with M. Zakai) “ The Sard inequality on Wiener space ”. *Journal of Functional Analysis*, Vol.149, p.226–244 (**1997**).
70. (with L. Decreusefond) “ On the conditional characteristic functions of second order Wiener functionals ”. In *Stochastic Analysis and Related Topics VI, The Geilo Workshop*, **1996**, p.235–244 (**1997**). *Progress in Probability*, Vol.42, Birkhäuser, **1997**.
71. “Stochastic analysis on Lie Groups ”. In *Stochastic Analysis and Related Topics VI, The Geilo Workshop*, **1996**, p.129–158 (**1997**). *Progress in Probability*, Vol.42, Birkhäuser, **1997**.
72. (with M. Zakai) “ A monotonicity method for some elliptic stochastic partial differential equations ”. In *Statistics and Control of Stochastic Processes, The Lipster Festschrift*, p. 315–323. *Proceedings of Steklov Mathematical Institute Seminar*, World Scientific, **1998**.
73. (with M. Zakai) “ On the uniform integrability of Radon–Nikodym densities for Wiener measure ”. *Journal of Functional Analysis*, Vol.159, p.642–663, **1998**.
74. (with L. Decreusefond) “ Stochastic analysis of the fractional Brownian motion ”. *Potential Analysis*, Vol.10, p.177–214, (**1999**).
75. (with M. Zakai) *Transformation of Measure on Wiener Space*. SMM, Springer **1999**.
76. “Dérivabilité globale et locale des fonctionnelles de Wiener”. *C. R. Acad. Sci. Paris*, t. 328, Série I, p.707–710, (**1999**).
77. (with M. Zakai) “Some measure-invariant point transformations on the Wiener space and their ergodicity”. Preprint, (**1999**).

78. (with M. Zakai) “Embedding the Abstract Wiener space in a probability space”. *Journal of Functional Analysis*, 171, p.124–138, (**2000**).
79. (with D. Feyel) “The notion of convexity and concavity on Wiener space”. *Journal of Functional Analysis*, 176, p. 369-400 (**2000**).
80. (with M. Zakai) “Ergodicité des rotations sur l’espace de Wiener”. *CRAS*, t. 330, Série I, p.725–728, (**2000**).
81. “Properties of measure preserving shifts on the Wiener space”. *Progress in Probability*, Vol. 50, 133-137 (**2001**).
82. “Damped logarithmic Sobolev inequality on the Wiener space”. In *Stochastic Analysis and Related Topics VII, The Silivri Workshop*. L. Decreasefond, B. Oksendal and A.S. Üstünel (Eds.), p. 245-249. Birkhauser (**2001**).
83. (with M. Zakai) “Some measure preserving pointtransformations on the Wiener space and their ergodicity”. In *Optimal Control and Partial Differential Equations, Festschrift in thehonour of A. Bensoussan*. J. L. Menaldi, E. Rofman and A. Sulem (Eds.), p.293-311. IOS Press, **2001**.
84. (with Y. Hu and M. Zakai) “Tangent processes on Wiener space”. *Journal of Functional Analysis*, Vol.192, 187-234, **2002**.
85. (with D. Feyel) “Measure transport on Wiener space and the Girsanov Theorem”. *C.R. Acad. Sci. Paris, Ser. I*, p. 1025-1028, **2002**.
86. “Gaussian measure of the intersection of two absolutely convex sets”. *Stochastic Analysis and Related Topics VIII*, p. 203. *Progress in Probability*, Vol. 53. Birkhäuser **2003**.
87. (with D. Feyel) “Monge-Kantorovitch measure transportation and Monge-Ampère equation on Wiener space”. *Probab. Theory Relat. Fields*, Vol. 128, 347-385, **2004**.
88. (with D. Feyel) “Monge-Kantorovitch measure transportation, Monge-Ampère equation and the Ito calculus”. *Advanced Studies in Pure Mathematics, Math. Soc. of Japan*, Vol.41, p. 32-49, **2004**.
89. (with D. Feyel) “Some remarks on the positivity of random variables on a Gaussian probability space”. *C.R.A.S. Paris, Ser. I, Vol.339*, p. 873-877, **2004** .
90. (with D. Feyel) “The strong solution of the Monge-Ampère equation on the Wiener space for log-concave densities”. *C.R.A.S. Paris, Ser. I, Vol. 339*, p. 49-53, **2004**.
91. (with D. Feyel) “The strong solution of the Monge-Ampère equation on the Wiener space for log-concave measures: General case”. *Journal of Functional Analysis*, Vol. 232, 29-55, **2006**.

92. (with D. Feyel and M. Zakai) "The realization of positive random variables via absolutely continuous transformations of measure on Wiener space". Probability Surveys, Vol. 3, p. 170-205, **2006**.
93. (with M. Zakai) "The invertibility of adapted perturbations of identity on the Wiener space". C.R.A.S. Paris, Ser. I, Vol. 342, p. 689-692, **2006**.
94. (with M. Zakai) "Sufficient conditions for the invertibility of adapted perturbations of identity on the Wiener space". Preprint, to appear in Probability Theory and Related Fields.
95. "Estimation for the additive Gaussian channel and Monge-Kantorovitch measure transportation". Preprint, to appear in Stochastic Processes and its Applications.