CURRICULUM VITAE

Panagiotis E. Souganidis

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EDUCATION

Ph.D. University of Wisconsin-Madison, 1983
M.A. University of Wisconsin-Madison, 1981
B.A. National University of Athens, Greece, 1981

AREA OF SPECIALIZATION:

Partial Differential Equations

EMPLOYMENT

Academic Positions

The University of Chicago, Charles H. Swift Distinguished Service Professor, 2008 –
The University of Texas at Austin, R. L. Moore Chair, 2005 – 2008
The University of Texas at Austin, Penzoil Company Regents Professor 2002 – 2005
The University of Texas at Austin, Ashbel Smith Professor 2001 – 2002
The University of Texas at Austin, Professor, 1999 – 2008
University of Wisconsin-Madison, Professor, 1991 – 2001
Brown University, Professor, 1991–1993
Brown University, Associate Professor, 1987 – 1991
Brown University, Assistant Professor, 1983 – 1987
University of Wisconsin-Madison, Teaching/Research Assistant, 1979 – 1983

Visiting Positions

Mittag-Leffler Institute, Stockholm, September 2014, September 1997
University of Paris-VI, Visiting Professor, June 2013
University of Paris-Dauphine, Visiting Professor, June 2014, June 2013, June 2012, June 2011, July 2007, July 2004, July 2002, July 2001, June 1999, June 1997, June 1996, June 1995, June 1994, May 1993, May 1992, May 1989
College de France, Visiting Professor, June 2009
Isaac Newton Institute for Mathematical Sciences, Visiting Fellow, Spring 2007
University of Tours, Visiting Professor, June 2003, May 2001, June 1998, June 1993
University of Crete, Greece, Visiting Professor, July-August 1996
Chuo University, Tokyo, Visiting Professor, April 1992
The Institute for Advanced Study, Member, 1990 - 1991
University of Rome (I) and Padova, Visiting Professor, May 1991
The Institute for Advanced Study, Visitor, January - May 1989
University of Minnesota-Minneapolis, Postdoctoral Fellow, 1984 - 1985

HONORS, AWARDS

Fellow of the American Mathematcal Society (2012 – present)
Highly Cited Researcher (2003)
College de France, Visiting Professor (2009)

Charles H. Swift Distinguished Service Professor in Mathematics and the College, The University of Chicago (2008–to present)
R. L. Moore Chair, The University of Texas at Austin (2005-2008)
Penzoil Company Regents Professor, The University of Texas at Austin (2003-2005)
Asbel Smith Professor, The University of Texas at Austin (2001-2003)
Bodossaki Foundation Academic Prize (1996)
Villas Associate, University of Wisconsin-Madison (1996-1997)
International Congress of Mathematicians (45 minute invited lecture) (1994)
Alfred P. Sloan Fellow (1989)
Presidential Young Investigator (1987)

MEMBERSHIPS

American Mathematical Society, SIAM, AAAS

EDITORIAL WORK

Communications in Partial Differential Equations, Co-Editor, 1992 – present
Electronic Journal on Differential Equations, Associated Editor, 1993 – present
Anal. Institute H. Poincare Analyse Non Lineaire, Associate Editor, 2001 – present
Bulletin of American Mathematical Society, Associate Editor, 2001 – 2010
Encyclopedia of Applied Mathematics and Computations, Associate Editor, 2008–present
Journal of Nonlinear Differential Equations and Applications, Associate Editor, 2008 – present
ESAIM: Control, Optimisation and Calculus of Variations, Associate Editor, 2008–2012
Journal de Mathematiques, Pures et Appliques, Associate Editor, 2009–present
Stochastic Partial Differential Equations:Analysis and Computation, Associate Editor, 2011–present
Mathematical Models and Methods in Applied Sciences, Associate Editor, 2013–present
Research in Mathematical Sciences, Associate Editor, 2014-present

SERVICE TO THE PROFESSION

Chair of the committee to select the new director of the IMA
Board of Governors, IMA, 2010–2015
Council of the AMS, Member at Large, 2009–2012
Co-organizer of workshop on "Stochastic Homogenization", June 2015, Banff, Canada
Co-organizer of special semester on "Homogenization and Random Phenomena", Fall 2014, Mittag-Leffler Institute, Stockholm, Sweden
Co-organizer of the Inaugural Analysis School, June 2014, Chicago
Co-organizer of summer school on "Stochastic homogenization", June 2012, Chicago
Member of the review committee of the Department of Mathematics of UBC, 2012
Member of the organizing committee for the tutorial program on "viscosity solutions and mathematical biology", September 2011, Hokaido, Japan
Member of the Organizing Committee of the workshop on "Stochastic Partial Differential Equations: Theory, numerics and applications", Isaac Newton, Institute, Cambridge, UK.
Member of the Scientific Advisory Board, Banff International Research Station
Member of the Organizing Committee of the special program on "Stochastic Partial Differential Equations", January - June 2010, Isaac Newton Institute, Cambridge, UK
Member of the organizing committee for the tutorial program on "viscosity solutions and related topics", July 2010, Hokaido, Japan
Member of the Scientific Committee of the Summer 2009 PIMS Thematic program on Nonlinear PDE
Co-organizer of the workshop on "Analysis of nonlinear PDEs and free boundary problems: Applications to homogenization", July 2009 Thematic Programme on Nonlinear PDE, PIMS, Vancouver, Canada

Co-organizer of the conference "Future directions in the theory of nonlinear pde", December 2008, Austin, TX
Co-organizer of the conference "Current Perspectives in Applied Mathematics", Courant Institute, May 2009, New York
Member of the Scientific Committee of the International Conference "Contemporary Applied Mathematics", January 2009, Shanghai, China
Co-organizer of workshop on "Numerical methods for degenerate elliptic equations", PIMS, Banff, December 2006
Co-organizer of a conference on "Random homogenization", CIRM, Marseille, France, July 2005
Co-organizer of a workshop on "Recent developments in random homogenization", INDAM, Rome, Italy, May 2005
Co-organizer of a workshop on "Front propagation and nonlinear stochastic pde's for combustion applications", Montreal, January 2005
Member of the Organizing Committee of the 2004-2005 thematic year on "The mathematics of stochastic multiscale modelling", CRM, Montreal
Member of the Scientific Committee of the European Training Network on "Hyperbolic and kinetic equations"
Member of the Scientific Committee of the 2001 summer program on "Nonlinear PDE" PIMS, Vancouver, Canada
Co-organizer of the special program on "Viscosity methods in PDE", PIMS, Vancouver , July 2001
Co-organizer of the conference on "Nonlinear analysis", University of California-Santa Barbara, November 2000
Co-organizer of the special program on "Geometrically based motions", IPAM, Spring 2001
Co-organizer of the workshop on "Moving interfaces and threshold dynamics", IPAM, May 2001
Co-organizer of the conference on "Turbulent reaction diffusion", Herakleion, Greece, March 1999
Co-organizer of a Euroconference on "Front propagation", Herakleion, Greece, July 1988
Co-organizer of the summer program on "Conservation laws", Herakleion, Greece, June 1998
Co-organizer of the summer program on "Viscosity solutions", Herakleion, Greece, July 1998
Organizer of a special session at the SIAM meeting on Control, Minneapolis, September 1992
Co-organizer of a special session at the 25th IEEE-CDC, Athens, Greece
Co-organizer of a meeting on "Stochastic control and PDE" Brown University
Co-organizer of a special session at the 29th IEEE-CDC, Hawaii
Co-organizer of a special session at the AMS meeting, Philadelphia, PA
Refereeing papers and proposals
Member of NSF Review Panels

RESEARCH GRANTS

National Science Foundation

DOCTORAL COMMITTEES

O. Ley, University of Tours, France
E. Texeiro, University of Texas at Austin
M. Tores, University of Texas at Austin
L. Silvestre, University of Texas at Austin
J. Nolen, University of Texas at Austin
D. Moreira, University of Texas at Austin
C. Imbert, University of Paris 9
A. Young, University of Texas at Austin
R. Alonso, University of Texas at Austin

C. Michoski, University of Texas at Austin
B. Orkan, University of Texas at Austin
N. Guillen, University of Texas at Austin
A. Ciomaga, Ecole Normale de Cachan, France
S. Mirahimi, University of Paris 6
N. Forcadel, University of Paris 9
B. D. Froese, Simon Fraser University

GRADUATE STUDENTS

G. Kossioris, Professor, Department of Mathematics, University of Crete, Greece
M. Katsoulakis, Professor, Department of Mathematics, University of Massachusetts, Amherst
G. Pires, Assistant Professor, Department of Mathematics, Instituto Superior Technico, Lisbon, Portugal
I. C. Kim, Associate Professor, Department of Mathematics, UCLA
D. Slepcev, Associate Professor, Department of Mathematics, Carnegie Mellon University
J. M. Fokam, Assistant Professor, American University of Nigeria
F. Carreon, Adjunct Lecturer, University of Michigan
R. Schwab, NSF Postdoctoral Fellow, Carnegie Mellon University
Y. Zhang, Research Analyst, Deutsche Bank
J. Lin, Van Vleck Assistant Professor, University of Wisconsin-Madison
B. Fehrman, current
O. Turanova, current
B. Seeger, current
E. Kava, current

POSTDOCTORAL ADVISOR–MENTOR

P. Soravia
A. Yip
M. Arisawa
A. Oberman
N. Dirr
M. Rudd
Y. Yu
S. Armstrong
A. Ciomaga
H. Tran
B. Gess
W. Jia

PUBLICATIONS

1. Differential games and representation formulas for solutions of Hamilton-Jacobi-Isaacs equations (with L.C. Evans), Indiana U. Math. J. **33** (1984), no. 5, 773-797.
2. Developments in the theory of nonlinear first-order partial differential equations (with M.G. Crandall), *Differential Equations, Birmingham, Alabama, 1983*, 131-142, North-Holland Math. Studies, 92, North-Holland, Amsterdam, 1984.
3. A PDE approach to some large deviations problems (with W. H. Fleming). *Nonlinear systems of partial differential equations in applied mathematics, Part 1 (Santa Fe, N.M., 1984)*, 441–447, Lectures in Appl. Math. **23**, Amer. Math. Soc., Providence, RI, 1986.
4. Existence of viscosity solutions of Hamilton-Jacobi equations, J. Differential Equations **56** (1985), no. 3, 345-390.

5. Approximation schemes for viscosity solutions of Hamilton-Jacobi equations, J. Differential Equations **59** (1985), no. 1, 1-43.
6. Max-min representations and product formulas for viscosity solutions of Hamilton-Jacobi equations with applications to differential games, Nonlinear Anal. **9** (1985), no. 3, 217-257.
7. Asymptotic series for solutions to the dynamic programming equation for diffusions with small noise (with W.H. Fleming), in *Proceeding of 24th IEEE Conference on Decision and Control*, December 1985.
8. Convergence of difference approximations of quasilinear evolution equations (with M.G. Crandall), Nonlinear Anal. **10** (1986), no. 5, 425-446.
9. A PDE approach to asymptotic estimates for optimal exit probabilities (with W. H. Fleming). *Stochastic differential systems (Marseille-Luminy, 1984)*, 281–285, Lecture Notes in Control and Inform. Sci., 69, Springer, Berlin, 1985.
10. Differential games, optimal control and directional derivatives of viscosity solutions of Bellman's and Isaacs' equations (with P.-L. Lions), SIAM J. Control Optim. **23** (1985), no. 4, 566-583.
11. PDE-viscosity solution approach to some problems of large deviations (with W.H. Fleming), Ann. di Scuola Norm. Sup. Pisa Cl. Sci. (4) **13** (1986), no. 2, 171-192.
12. Differential games, optimal control and directional derivatives of viscosity solutions of Bellman's and Isaacs' equations, II (with P.-L. Lions), SIAM J. Control Optim. **24** (1986), no. 5, 1086-1089.
13. A remark about viscosity solutions on the boundary, Proc. Amer. Math. Soc. **96** (1986), no. 2, 323-330.
14. Recent developments in the theory of nonlinear scalar first and second order partial differential equations. *Dynamics of Infinite Dimensional Systems (Lisbon, 1986)*, 301-311, NATO Adv. Sci. Inst. Ser. F Comput. Systems Sci., 37, Springer, Berlin, 1987.
15. A regularity result for viscosity solutions of Hamilton-Jacobi equations in one space dimension (with R. Jensen), Trans. Amer. Math. Soc. **301** (1987), no. 1, 137-147.
16. Blow-up of solutions of Hamilton-Jacobi equations (with A. Friedman), Comm. Partial Differential Equations **11** (1986), no. 4, 397- 443.
17. Asymptotic series on the method of vanishing viscosity (with W.H. Fleming), Indiana Univ. Math. J. **35** (1986), no. 2, 425-448; Erratum: Indiana Univ. Math. J. **35** (1986), no. 4, 925.
18. Stability and instability of solitary waves of Korteweg-deVries type (with J.L. Bona and W.A. Strauss), Proc. Roy. Soc. Lond. Ser. A **411** (1987), no. 1841, 395-412.
19. The relation between the porous-medium and eikonal equations in several space dimensions (with P.- L. Lions and J.L. Vazquez), Rev. Mat. Iberoamericana **3** (1987), no. 3-4, 275-310.
20. Viscosity solutions of second-order equations, stochastic control and stochastic differential games (with P.-L. Lions). *Stochastic differential systems, stochastic control theory and applications (Minneapolis, Minn., 1986)*, 293-309, IMA Vol. Math. Appl.,10, Springer, New York, 1988.
21. A uniqueness result for viscosity solutions of second order fully nonlinear partial differential equations (with R. Jensen and P.-L. Lions). Proc. Amer. Math. Soc. **102**, (1988), no. 4, 975-978.
22. Two player, zero-sum stochastic differential games (with W.H. Fleming). *Analyse mathematique et applications*, 151–164, Gauthier-Villars, Montrouge, 1988.

23. Maximal solutions and universal bounds for some partial differential equations of evolution (with M.G. Crandall and P.-L. Lions). Arch. Rational Mech. Anal. **105** (1989), no. 2, 163-190.
24. On the existence of value functions of two player, zero-sum stochastic differential games (with W. H. Fleming). Indiana Univ. Math. J. **38** (1989), no. 2, 293-314.
25. A PDE approach to geometric optics for certain reaction-diffusion equations (with L. C. Evans), Indiana Univ. Math. J. **38** (1989), no. 1, 141-172.
26. A PDE approach to certain large deviations problem for systems of parabolic equations (with L.C. Evans). Analyse non lineaire (Perpignan, 1987). Ann. Inst. H. Poincare Anal. Non Lineaire **6** (1989), suppl., 229–258.
27. On nonlinear evolution equations (with M. G. Crandall). Nonlinear Anal. **13** (1989), no. 12, 1375-1392.
28. Wavefront propagation for reaction-diffusion systems of PDE (with G. Barles and L. C. Evans). Duke Math. J. **61** (1990), no. 3, 835-858.
29. Instability of a class of dispersive solitary waves (with W. A. Strauss). Proc. Roy. Soc. Edinburgh Sect. A **114** (1990), nop. 3-4, 195-212.
30. Convergence of approximation schemes for fully nonlinear second order equations (with G. Barles). Asymptotic Anal. **4** (1991), no. 3, 271-283.
31. Convergence of MUSCL type methods for scalar conservation laws (with P.-L. Lions). C.R. Acad. Sci. Paris Série I Math. **311** (1990), no. 5, 259-264.
32. Front propagation for reaction-diffusion equations of bistable type (with L. Bronsard and G. Barles). Ann. Inst. H. Poincaré Anal. Non Lineaire **9** (1992), no. 5, 479-496.
33. Phase transitions and generalized motion by mean curvature (with L. C. Evans and H. M. Soner). Comm. Pure Appl. Math. **45** (1992), no. 9, 1097-1123.
34. Singularities and uniqueness of cylindrically symmetric surfaces moving by mean curvature (with H. M. Soner). Comm. Partial Differential Equations **18** (1993), no. 5-6, 859-894.
35. Front propagation and phase field theory (with G. Barles and H. M. Soner). SIAM J. Control Optim. **31** (1993), no. 2, 439-469.
36. Fully nonlinear second-order degenerate elliptic equations with large zeroth-order term (with P.-L. Lions). Indiana Univ. Math. J. **42** (1993), no. 4, 1525–1543.
37. Interacting particle systems and generalized evolution of fronts (with M. Katsoulakis). Arch. Rational Mech. Anal. **127** (1994), no. 2, 133-157.
38. Large-scale front dynamics for turbulent reaction-diffusion equations with separated velocity scales (with A. Majda). Nonlinearity **7** (1994), no. 1, 1–30.
39. A remark on the asymptotic behavior of the solution of the KPP equation (with G. Barles). C.R. Acad. Sci. Paris, Sér. I Math. **319** (1994), no. 7, 679–684.
40. Anisotropic motion of an interface relaxed by the formation of infinitesimal wrinkles (with M. Gurtin and H. M. Soner). J. Differential Equations **119** (1995), no. 1, 54–108.
41. Convergence of MUSCL and filtered schemes for scalar conservation laws and Hamilton-Jacobi (with P.-L. Lions). Numer. Math. **69** (1995), no. 4, 441-470.
42. Generalized motion of noncompact hypersurfaces with velocity having arbitrary growth on the curvature tensors (with H. Ishii). Tohuko Math. J. (2) **47** (1995), no. 2, 227–250.
43. Phase field theory for a FitzHugh-Nagumo-type systems (with P. Soravia). SIAM J. Math. Anal. **42** (1996), no. 5, 1341-1359.
44. Generalized motion by mean curvature as a macroscopic limit for stochastic Ising models with long range interactions and Glauber dynamics (with M. Katsoulakis). Comm. Math. Physics **169** (1995), no. 1, 61-97.

45. Effective geometric front dynamics for premixed turbulent combustion with separated velocity scales (with P. Embid and A. Majda). Comb. Sci. Tech. **103** (1995) 85-115.
46. Comparison of turbulent flame speeds from complete averaging and the G-equation (with P. Embid and A. Majda). Phys. of Fluids **7** (1995), no. 8, 2052-2060.
47. Front propagation for reaction-diffusion arising in combustion theory (with G. Barles and C. Georgelin). Asymptot. Anal. **14** (1997), no. 3, 277-292.
48. Existence and stability of entropy solutions for the hyperbolic systems of isentropic gas dynamics in Eulerian and Lagrangian coordinates (with P.-L. Lions and B. Perthame). Comm. Pure Appl. Math. **49**, no. 6. (1996) 599-638.
49. Weak stability of isentropic gas dynamics system for $\gamma = 5/3$ (with P. -L. Lions and B. Perthame). *Progress in elliptic and parabolic partial differential equation (Capri, 1994)*, 184–192, Pitman Res. Notes Math. Ser., **350**, Longman, Harlow, 1996.
50. Interface dynamics in phase transitions. *Proceedings of the International Congress of Mathematicians, Vol. 1,2 (Zurich, 1994)*, 1133-1144, Birkhäuser, Basel, (1995).
51. Bounds on enhanced turbulent flame speeds for combustion with fractal velocity fields (with A. Majda). J. Stat. Phys. **83** (1996) 933-954.
52. Front propagation: Theory and Applications. *Viscosity solutions and applications (Montecatini Terme, 1995)*, Lecture Notes in Math., 1660, Springer, Berlin, 1997.
53. Stochastic Ising models and anisotropic front propagation (with M. Katsoulakis). J. Statist. Phys. **87** (1997), no. 1-2, 63-89.
54. A new approach to generalized front propagation problems: Theory and applications (with G. Barles). Arch. Rational Mech. Anal. **141** (1998), no. 3, 237-296.
55. Examples and counterexamples for Huygens principle in premixed combustion (with P. Embid and A. Majda), Combust. Sci. Tech. **120** (1996) 273-303.
56. Threshold dynamics type approximation schemes for propagating fronts (with H. Ishii and G. Pires). J. Math. Soc. Japan **51** (1999), no. 2, 267-308.
57. Two-player, zero sum differential games and viscosity solutions, *Stochastic and differential games*, 69–104, Ann. Internat. Soc. Dynam. Games, 4, Birkhäuser Boston, Boston, MA, 1999.
58. Fully nonlinear stochastic partial differential equations (with P.-L. Lions). C.R. Acad. Sci. Paris Ser. I Math **326** (1998), no. 9, 1085-1092.
59. A limiting case for velocity averaging (with B. Perthame). Ann. Sci. École. Norm. Sup. (4) **31**, no. 4, (1998) 591-598.
60. Remarks on the Dirichlet problem for quasilinear elliptic and parabolic equations (with G. Barles and E. Rouy). *Stochastic analysis, control, optimization and applications*, 209–222, Systems Control Found. Appl., Birkhäuser, Boston, Boston, MA, 1999.
61. Un cas limite des lemmes de compacite en moyenne motive par la formulation cinetique de systemes hyperbolique (French) (with B. Perthame). Journees "Equations aux Derivees Partielles" (Saint Jean–de–Monts) (1997), Exp. No. XII, Ecole Polytech., Palaiseau, 1997.
62. Flame fronts in turbulent combustion models with fractal velocity fields (with A. J. Majda). Comm. Pure Appl. Math **51** (1998), no. 11-12, 1337-1348.
63. A limiting case for the averaging lemma motivated by the kinetic formulation of some classical systems in fluid mechanics (with B. Perthame). *Dynamical systems, plasma and gravitation* (Orleans La Source. 1997) 55–61, Lect. Notes in Phys., **518**, Springer, Berlin, 1999.
64. Finite volume schemes for Hamilton-Jacobi equations (with G. Kossioris and Ch. Makridakis). Numer. Math. **83** (1999), no. 3, 427–442.

65. Fully nonlinear stochastic partial differential equations: non-smooth equations and applications (with P. L. Lions). C.R. Acad. Sci. Paris Ser. I **327** (1998), no. 8, 735-741.
66. The effect of turbulence on mixing in prototype reaction diffusion systems (with A. Majda). Comm. Pure Appl. Math. **53** (2000), no. 10, 1284-1304.
67. On the large time behavior of solutions Hamilton-Jacobi equations (with G. Barles). SIAM J. Math. Anal. **31** (2000), no. 4, 925-939.
68. Stochastic homogenization for Hamilton-Jacobi equations and applications, Asymptot. Anal. **20** (1999), no. 1, 1-11.
69. Uniqueness of weak solutions of fully nonlinear stochastic partial differential equations (with P.-L. Lions). C. R. Acad. Paris Ser. I Math. **331** (2000), no. 10, 783-790.
70. Fully nonlinear stochastic partial differential equations with semilinear stochastic dependence (with P.-L. Lions). C. R. Acad. Paris Ser. I Math. **331** (2000), no. 8, 617-624.
71. Space-time periodic solutions and long-time behavior of solutions to quasilinear parabolic equations (with G. Barles). SIAM J. Math. Anal. **32** (2001), no. 6, 1311-1323.
72. Equations aux derivees partielles stochastiques nonlineaires et solutions de viscosite (with P. -L. Lions). *Seminaire: Equations aux Derivees Partielles*, 1998-1999, Exp. No. I, Semin. Equ. Deriv. Partielles, Ecole Polytech., Pallaiseau, 1999.
73. Some counterexamples on the asymptotic behavior of the solutions of Hamilton-Jacobi equations (with G. Barles). C.R. Acad. Sci. Paris Ser. I Math **330** (2000), no. 11, 963-968.
74. Viscosity solutions of fully nonlinear stochastic partial differential equations, *Viscosity solutions of differential equations and related topics (Japanese) Kyoto, 2001* Surikaisekikenky Kokyuroku **1287** (2002) 58-65.
75. Recent developments in the theory of front propagation and its applications, *Modern methods in scientific computing and applications (Montreal, QC, 2001)*, 397–449, NATO Sci. Ser. II Math. Phys. Chem., 75, Kluwer Acad. Publ., Dordrecht, 2002.
76. Correctors for the homogenization theory of Hamilton-Jacobi equations (with P.-L. Lions). Comm. Pure Appl. Math. **56** (2003), no. 10, 1501-1524.
77. Uniqueness of motion by mean curvature perturbed by stochastic noise (with N. Yip). Ann. Inst. H. Poincare Anal. Non Lineaire **21** (2004), no. 1, 1-23.
78. Dissipative and entropy solutions to non-isotropic degenerate parabolic balance laws (with B. Perthame). Arch. Ration. Mech. Anal. **170** (2003), no. 4, 359-370; Attendum to: "Dissipative and entropy solutions to non-isotropic degenerate parabolic balance laws" [Arch. Ration. Mech. Anal. 170 (2003), no. 4, 359–370] (with B. Perthame). Arch. Ration. Mech. Anal. **204** (2004), no. 3, 443-447.
79. Homogenization for fully nonlinear, second-order elliptic and parabolic partial differential equations in stationary ergodic media (with L. Caffarelli and L. Wang). Comm. Pure Appl. Math. **58** (2005), no. 3, 319-361.
80. Homogenization for "viscous" Hamilton-Jacobi equations in stationary, ergodic media (with P.-L. Lions). Comm. Partial Differential Equations **30** (2005), no. 1-3, 335-376.
81. Front propagation for a jump process arising in spatial ecology (with B. Perthame). Discrete Contin. Dyn. Syst. **13** (2005), no. 5, 1235-1246.
82. Large time behavior for viscous and non-viscous Hamilton-Jacobi equations forced by additive noise (with N. Dirr). SIAM J Math Anal **37** (2005), no. 3, 777-796.
83. Homogenization of degenerate second-order pde in periodic and almost periodic environments and applications (with P.-L. Lions). Ann. Inst. H. Poincare, Anal. Non Lineaire, **22** (2005), no. 5, 667-677.

84. Recent developments in the theory of homogenization for fully nonlinear first- and second-order pde in random environments. Boletin de la Sociedad Espanola de Matematica Aplicada **34** (2006), 81–90.
85. A rate of convergence for monotone finite difference approximations to fully nonlinear uniformly elliptic pde (with L. Caffarelli), Comm. Pure Appl. Math.**LXI** (2008), no. 1, 1-17.
86. Ergodic problems and periodic homogenization for fully nonlinear equations in half-space domains with Neumann boundary conditions (with G. Barles, F. Da Lio and P.-L. Lions), Indiana Univ. Math. Journal **57** (2008), no. 5, 2355–2376.
87. Asymptotic and numerical homogenization (with B. Engquist), Acta Numer. **17** (2008), 147-190.
88. Asymmetric potentials and motor effect: a large deviation approach (with B. Perthame), Arch. Ration. Mech. Anal. **193** (2009), no. 1, 153–169.
89. A discussion about the homogenization of moving fronts (with P. Cardaliaguet and P.-L. Lions), Journal Mathematiques Pure et Appliques **91** (2009), no. 4, 339–363.
90. Asymmetric potentials and motor effect: a homogenization approach (with B. Perthame), Ann. Inst. H. H. H. Poincar Anal. Non Linaire **26** (2009), no. 6, 2055–2071.
91. Recent developments in the theory of stochastic homogenization of first- and second- order fully nonlinear pde and applications, in *Proceedings of International Conference on the 25th Anniversary of Viscosity Solutions"*, GAKUTO International Series, Mathematical Sciences and Applications.
92. Convergence of nonlocal threshold dynamics approximations to front propagation (with L. Caffarelli), Arch. Ration. Mech. Anal. **195** (2010), no. 1, 1–23.
93. Stochastic homogenization for Hamilton-Jacobi and "viscous" Hamilton-Jacobi equations with convex nonlinearities-revisited (with P.-L. Lions), Comm. Mathematical Sciences **8** (2010), no. 2, 627–637.
94. The existence and uniqueness of weak solutions for precipitating fronts: A novel hyperbolic free boundary problem in several space dimensions (with A. J. Majda), Comm. Pure Appl. Math. **63** (2010), no. 10, 1351–1361.
95. Rates of convergence for the homogenization of uniformly elliptic pde in random media (with L. Caffarelli), Invent. Math. **180** (2010), no. 2, 301–360.
96. A homogenization approach to flashing ratchets (with B. Perthame), Nonlinear Differential Equations Appl. **18** (2011), no. 1, 45-38.
97. Homogenization and enhancement for the G-equation in periodic media (with P. Cardaliaguet and J. Nolen), Arch. Ration. Mech. Anal. **199** (2011), no. 2, 527-561.
98. Singular Hamilton-Jacobi equation for the tail problem (with S. Mirrahimi, G. Barles and B. Perthame), SIAM J. Math. Analysis **44** 2012, no. 6, 4297-4319.
99. Stochastic homogenization of Hamilton-Jacobi and degenerate Bellman equations in unbounded environments (with S. Armstrong), J. Math. Pure Appl. (9) **97** (2012), no. 5, 460-504.
100. A pde approach to small stochastic perturbations of Hamiltonian flows (with H. Ishii), J. Dif. Equations **252** (2012), no. 2, 1748–1775
101. Homogenization of $L^\infty-$ variational problems (with S. Armstrong), Adv. Math. **229** (2012), no. 6, 3508–3535.
102. Homogenization and enhancement of the G-equation in random environments (with P. Cardaliaguet), Comm. Pure Appl. Math. **60** (2013), no. 10, 1582–1628.
103. A homogenization approach for the motion of motor proteins (with S. Mirrahimi), NODEA Nonlinear Differential Equations Appl. **20** (2013), no. 1, 129147.

104. Stochastic averaging lemmas for kinetic equations (with B. Perthame and P.-L. Lions), Seminaire Equations Aux Derivee Partielles (Ecole Polytechnique) 2011-2012, no. 1.

105. Stochastic homogenization of level-set convex Hamilton-Jacobi equations (with S. Armstrong), Int. Math. Res. Not. **2013** (2013), no. 17, 3420–3449.

106 Scalar conservation laws with rough (stochastic) fluxes (with B. Perthame and P.-L. Lions). Stochastic Partial Differential Equations: Analysis and Computations **1** (2013), no. 4, 664–686.

107. Concentration phenomena for neutronic multi-group diffusion in random environments (with S. Armstrong), Ann. Inst. H. Poincare Anal. Non Lineaire **30** (2013), no. 3., 419–439.

108. Error estimates and convergence rates for the stochastic homogenization of Hamilton-Jacobi equations (with S. Armstrong and P. Cardaliaguet), J. Amer. Math. Soc. **27** (2014), no. 2, 479–540.

109. Time fluctuations in a population model of adaptive dynamics (with S. Mirrahimi and B. Perthame), Ann. Inst. H. Poincare Anal. Non Lineaire, to appear. arXiv:1306.0376.

110. Periodic approximations of the ergodic constants in the stochastic homogenization (with P. Cardaliaguet), Ann. Inst. H. Poincare Anal. Non Lineaire, to appear. arXiv:1308.3313.

111 Scalar conservation laws with rough (stochastic) fluxes: the spatially dependent case (with B. Perthame and P.-L. Lions). Stochastic Partial Differential Equations: Analysis and Computations, to appear. arXiv 1403.4424.

112 Metastability properties for parabolic equations with drift: Part 1 (with H. Ishii), Indiana Univ. Math. Journal, to appear. arXiv 1312.5504.

113 Stochastic homogenization of interfaces moving with changing sign normal velocity (with A. Ciomaga and H. Tran), J. Differential Equations, to appear. arXiv 1404.0364.

114 Scalar conservation laws with multiple rough fluxes (with B. Gess), Communications in Mathematical Sciences, to appear. arXiv 1406.2978.

115 Quantitative homogenization of elliptic pde with random oscillatory boundary data (with W. Feldman and I. Kim), J. Math. Pure Appl., to appear. arXiv:1408.0254

116 Large time average of reachable sets and applications to the homogenization of interfaces moving with oscillatory velocity (with W. Jing and H. Tran). arXiv:1408.2013.

117 Long-time behavior, invariant measures and regularizing effects for stochastic scalar conservation laws (with B. Gess). arXiv:1411.3939.

INVITED ADDRESSES

2014

Conference on "Stochastic Partial Differential Equations and Applications - IX", Levico, Italy
Workshop on "Rough Paths: Theory and Applications", IPAM, UCLA
Di Perna lecture, UC-Berkeley
Weizmann Institute, Rehovo, Israel
International workshop on "PDE and Related Nonlinear Topics", Hiroshima, Japan
King Abdullah University of Science and Technology, Jeddah, Saudi Arabia
Analysis Seminar, Department of Mathematics, University of Athens, Greece
Conference on "Kinetics, non standard diffusion and the mathematics of networks: emerging challenges in the sciences", UT-Austin
Conference on "New Trends in Optimal Control" (Plenary speaker), Tours, France
13th LMS-CMI Summer School in Numerical Analysis (main speaker), Sussex, UK
Special session on "Numerical Methods for Geometric Partial Differential Equations", Central AMS Meeting, Iowa State University

Workshop on "Mathematics of Geophysical Flows and Turbulence", Fudan University, Shanghai, China
Special session on "Theory, Numerical Methods, and Applications of Stochastic Systems and SDEs/SPDEs", AIMS, Madrid, Spain
Conference on "Partial Differential Equations: Basic Theory", University of Notre Dame
Worskhop on "Front Propagation and Particle Systems", Banff, Canada
Program on "Homogenization and Random Phenomena" (3 Lectures), Mittag-Leffler Institute, Sweden
Analysis Seminar, Waseda University, Tokyo, Japan
Probability Seminar, Division of Applied Mathematics, Brown University
Colloquium, Division of Applied Mathematics, Brown University

2013

Workshop on "Theory and Applications of Stochastic PDEs", IMA, Minneapolis
Conference in honor of Etienne Pardoux, CIRM, Marseille, France
Workshop on "Interplay of Theory and Numerics for Deterministic and Stochastic Homogenization", Oberwolfach, Germany
71 Midwest PDE meeting (Plenary Lecture), Univ. of Michigan, Ann Arbor
Emerging structures in Analysis and Probability: A conference in honor of Stephan Luckhaus, MPI, Leipzig, Germany
University of Maryland Colloquium, College Park
International Conference "Mathematics in Armenia. Advances and Perspectives, II", Tsaghkadzor, Armenia
International Conference in Applied Mathematics, Herakleion, Greece
Waseda University, Tokyo, Japan
King Abdullah University of Science and Technology, Jeddah, Saudi Arabia
Max Plank Insititute, Leipzig, Germany

2012

Workshop on "Nonlocal PDEs, Variational Problems and their Applications", IPAM
International Conference in Applied Mathematics, Shanghai, China
Columbia University (Colloquium)
Workshop on Stochastic Analysis and Stochastic Partial Differential Equations, Banff, Canada
Conference on "Nonlinear Partial Differential Equations and Applications" (principal speaker 2 lectures) Hangzhou, China
Conference on "Applied Partial Differential Equations in Physics, Biology and Social Sciences: Classical and Modern Perspectives" (Main invited speaker), Barcelona, Spain
Workshop on "Stochastic methods and Nonlinear PDEs", Cardiff, UK
4th GNAMPA-INDAM School on "Differential equations and dynamical systems" (4 lectures), Serapo, Italy
Summer school on "Stochastic homogenization" (5 lectures), Chicago
Workshop on "Random dynamical systems", IMA
Workshop on "Stochastic pde", INI, Cambridge, UK
Workshop on "Rough paths and pde", Oberwolfach, Germany
Workshop on "Geometric partial differential equations", Pisa, Italy
5th Symposium on analysis and pde, Purdue
"Fifteenth Riviere-Fabes Symposium on Analysis and PDE" (2 lectures), Minneapolis
Workshop on "Mostly maximum principle", Rome, Italy

2011

Workshop on "Nonlinear PDE in Valparaiso" (Plenary Lecture), Valparaiso, Chile
Workshop on "Random media: homogenization and beyond", IPAM, Los Angeles

Workshop on "Advancing numerical methods for viscosity solutions and applications" Banff, Canada
Midwest PDE Seminar, Univeristy of Illinois-Chicago Circle
College de France
Colloquium University of Maryland-College Park
Conference on "Hyperbolic Conservation Laws", Brown University, Providence
Conference on "Recent Advances in Nonlinear Partial Differential Equations: Part II" (2 Lectures), Chinese University of Hong Kong, Hong Kong, China
Conference on "Ginzburg-Landau equations, Dislocation and Homogenization" (tutorial 3 lectures), Ile de Re, France
Workshop on "Stochastic Partial Differential Equations: Theory, numerics and applications (3 lectures)', Herakleion, Crete, Greece
Workshop on "Nonlinear PDE", Lisbon, Portugal
Conference on "Fronts and Nonlinear PDEs", Ecole Normale Suprieure, Paris, France
CIME Course on "Viscosity Solutions" (5 Lectures), Italy
Conference on "The Analysis of Incompressible Fluids, Turbulence and Mixing", Carnegie Mellon University, Pittsburgh
Conference on "Stochastic PDEs: Analysis, Numerics, Geometry and Modeling", ETH-Zurich, Switzerland
Oxford University
Conference on "Front propagation, biological problems and related topics: viscosity solution methods for asymptotic analysis", Sapporo, Japan
University of Texas at Austin
Nachdiplom-Vorlesungen course on "Random homogenization", ETH-Zurich, Switzerland
Workshop on "Dynamical Optimization in PDE and Geometry: Applications to Hamilton-Jacobi, Ergodic Optimization, Weak KAM " (4 hours tutorial), Bordeaux, France
Workshop on "Multiscale Systems: theory and applications", Warwick, UK

2010

Midwest PDE Seminar, Purdue University
Conference on "Motions of Interfaces and Nonlinear PDEs", Tours, France
International Conference on "Nonlinear Partial Differential Equations and Related Analysis/Applications" in conjunction with the Spring 2010 Midwest PDE Seminar, Nortwestern University, Evanston
Workshop on "Deterministic and Stochastic Front Propagation", Banff, Canada
Applied Mathematics Seminar, Stanford University
Workshop on "Nonlinear Analysis and PDE", Austin
Workshop on "Nonlinear PDEs arising in mathematical biology: cell migration and tissue mechanics", Edingburgh, UK
Workshop on "Rough Paths", Isaac Newton Institute, Cambridge, UK
Conference on "PDE and Biology", Havana, Cuba
PDE Seminar, Division of Applied Mathematics, Brown University
Colloquium, Division of Applied Mathematics, Brown University
Conference on "Positivity: a key tool in nonlinear pde", Vietri, Italy
Conference on "Mathematics and Applications", Sardenia, Italy
East Midlands Stochastic Analysis, Warwick, UK
Workshop on "Stochastic Partial Differential Equations: Approximation, Asymptotics and Computation ", Isaac Newton Institute, Cambridge, UK
"The Fourth International Conference on Recent Advances in Applied Dynamical Systems", Jinhua, China
Workshop on ""Nonlocal operators and partial differential equations", Bedlewo, Poland
Tutorial on "Viscosity methods in nonlinear PDE and related topics" (3 lectures), Hokaido, Japan

Conference on "Recent Advances in the Numerical Approximation of Stochastic Partial Differential Equations", Illinois Institute of Technology, Chicago
International Conference on "Nonlinear PDE" Dnipropertrovsk, Ukraine
Workshop on "Fluid-Kinetic Modelling in Biology, Physics and Engineering", Isaac Newton Institute, Cambridge, UK
Workshop on "Nonlinear PDE", Fudan University, Shanghai, China
Midwest PDE meeting, University of Illinois-Chicago Circle, Chicago
PDE Seminar University of Michigan, Ann Arbor

2009

Conference on "Contemporary Applied Mathematics", Shanghai, China
Workshop on "Analysis of Stochastic Surface Evolution", Marx Plank Institute, Leipzig, Germany
Conference on "Weak KAM theory", Nice, France
Conference on "Trends in Nonlinear Analysis and PDE's", Milan, Italy
"IV International Symposium on Nonlinear Equations and Free Boundary Problems", Mar del Plata, Argentina
Workshop on "Flows and Networks in Complex Media", IPAM, Los Angeles
Workshop on "Mathematical Biology", Oberwolfach, Germany
Workshop"Variational Analysis and Applications", Erice, Italy
"Stochastic homogenization", a course (5 lectures) at College de France, Paris, France
Workshop on "Computational Multiscale Methods", Oberwolfach, Germany
Conference on "Reaction-diffusion systems and viscosity solutions", Taichung, Taiwan
Workshop on "Multiscale Analysis of Self Organization in Biology", Banff, Canada
Workshop on "New Connections Between Differential and Random Term Games, PDEs and Image Processing", Nonlinear PDE Thematic Programme, PIMS, Vancouver, Canada
Workshop on "Analysis of nonlinear PDEs and free boundary problems: Applications to homogenization" (3 Lectures), Nonlinear PDE Thematic Programme, PIMS, Vancouver, Canada
Workshop on "Phase Transitions", Marx Plank Institute, Leipzig, Germany
School and workshop on "PDE's, Optimal Design and Numerics III", Benasque, Spain
Workshop on "Asymptotics in Complex Systems", INDAM, Italy
Program on "Stochastic and Statistical Methods in Multiscale Systems", Shanghai, China

2008

Conference on "Stochastic Partial Differential Equations and Applications - VIII, Levico, Italy
Workshop on "Reaction-diffusion systems and chemotaxis", Orsay, France
PDE Session, "The 8th International Conference on Operations Research", Havana, Cuba
Analysis Seminar, Courant Institute, New York University, New York
Workshop on "Nonlocal operators and applications", BIRS, Banff, Canada
Workshop on "Viscosity Solutions of Differential Equations and Related Topics", RIMS, Kyoto, Japan
Conference on "Future directions in the theory of nonlinear partial differential equations", The University of Texas

2007

International Conference on "Reaction-diffusion systems and viscosity solutions" Providence University, Taichung, Taiwan
Workshop on "Numerical analysis of multi-scale computations", BIRS, Banff, Canada
Conference on "Stochastic pde", Cornell University
Workshop on "Evolution of Interfaces and Applications", Roscoff, France
Minisymposium in PDE, University of California, Santa Barbara
International conference "25th Anniversary of Viscosity Solutions", Tokyo, Japan

Workshop on "Nonlinear partial differential equations", Seoul, Korea.
Minisymposium on "Visocity methods in nonlinear pde and applications", ICIAM07, Zurich, Switzerland
Minisymposium on "Dynamics of nonlinear waves in heterogeneous media", ICIAM07, Zurich, Switzerland
Minisymposium on "Viscosity Solutions of Partial Differential Equations: Recent Advances and Applications", ICIAM07, Zurich, Switzerland
MSRI Summer Microprogram on Nonlinear Partial Differential Equations, Berkeley
Conference on Nonlinear Partial Differential Equations, Yalta, Ukraine
International conference on "Non-linear Diffusion: Mathematicas and Applications", El Escorial, Spain
Annual meeting of the Australian Mathematical Society (Plenary talk), Melbourne, Autralia
Institute for Mathematical Science, Chinese University of Hong Kong, Hong Kong, China
Istanbul Analysis Seminar, Istanbul, Turkey

2006

Special semester on"Stochastic Analysis and Stochastic Partial Differential Equations" (Resident Scholar), De Giorgi Center Pisa, March-July 2006
Summer School on "Probabilistic and analytical perspectives on contemporary PDE" (5 lectures), Center for Nonlinear Analysis, Carnegie Mellon University
Special Session on "Stochastic partial differential equations" ICMP, Rio, Brasil
Summer course on "Discontinuous change in behavior issues in partial differential equations" (3 lectures), Crete, Greece
Workshop on "Numerical methods for degenerate elliptic equations and applications", PIMS, Banff, Canada
Workshop on "Reaction-diffusion and free boundary problems" (2 lectures), PIMS, Banff, Canada
"New trends in viscosity solutions and nonlinear PDE" (main speaker), Lisbon, Portugal
PIMS Distinguished Speaker Seminar, University of British Columbia, Vancouver, Canada
Simon Fraser University, Vancouver, Canada
Conference on "Nonlinear PDE: Homogenization and kinetic equations", Vienna, Austria
Workshop on "Atomistic and stochastic aspects of nonlinear elasticity", MPI, Leipzig, Germany
Workshop on "Geometric analysis and PDEs", Naples, Italy
Minicourse in Partial Differential Equations (4 lectures), Buenos Aires, Argentina

2005

Americas VI meeting on "Nonlinear analysis and differential equations"(Minicourse), Santiago, Chile
Workshop on "Front propagation and nonlinear stochastic pdes for combustion applications", CRM, Montreal, Canada
Semester on "Nonlinear waves", Mittag-Leffler Institute, Stockholm, Sweden
School on "Recent advances in homogenization" (3 lectures), INDAM, Rome, Italy
International Seminar on "Control theory and theory of generalized solutions of Hamilton-Jacobi equations" (CGS'05) (plenary lecture), Ural Branch of Russian Academy, Russia
Workshop on "Stochastic analysis and partial differential equations", Northwestern University
Conference on "Stochastic homogenization", CIRM, Marseille, France
Conference in honor of I. Babuska, Austin
III International symposium in "PDE and free boundary problems", Buenos Eyres, Argentina
International International Forum on "Multiscale methods and partial differential equations", IPAM
Workshop on "Numerical methods for optimal control in high dimensions", ARCC, Palo Alto
School on "PDE and optimal design", Benasque Center, Spain

"Nonlinear Partial Differential Equations", Alustha, Ukraine
"Nonlinear elliptic pde and applications", MSRI, Berkeley
Congress of the Spanish Soc. Applied Mathem. (SEMA) (plenary speaker), Madrid, Spain
Conference on "Nonlinear pde in honor of Luis Caffarelli", Vienna, Austria
Rolf Schock Prize Meeting in Mathematics, Stokholm, Sweden
School on "Moving boundaries" (4 lectures), Lyon, France
Workshop on "Moving boundaries", Lyon, France

2004

Conference on "Stochastic partial differential equations and Applications", Levico, Italy
Washeda University (Colloquium), Tokyo, Japan
Colloque on "Analyse des EDP", Forges-les-Eaux, France
Special session on "Fluid dynamics, diffusion and reaction" (40 minutes talk) AMS meeting, Northwestern University
University of Illinois Urbana
Workshop on "Geometric flows: Theory and computation", IPAM
Midnight Sun Narvik Conference on "Multi - scale problems and asymptotic analysis", Norvik, Norway.
International Conference on "Recent trends in kinetic theory and its applications" (RTKTA-2004), Kyiv, Ukrain
Conference on "Stochastic optimal control and applications", Ruen, France
World Congress of Nonlinear Analysts, Orlando, FL
Conference on "Partial differential equations", Kyoto, Japan
Workshop on "Differential equations and applications", Instanbul, Turkey
Conference on "Viscosity, metric and control theoretic methods in nonlinear PDE", Gaeta, Italy
Meeting on "Global and geometric aspects in nonlinear PDE", Yerevan, Armenia

2003

Workshop on "Stochastic partial differential equations", IAS, Princeton
Workshop on "Image processing and computational methods", University of Kentucky
Meeting in honor of Carl de Boor, Dagstuhl, Germany
Symposium in "Analysis and PDE", Purdue University
Workshop in on "Geometric and global PDE with applications", Stockholm, Sweden
IMA 20th Anniversary Conference (plenary lecture), Minneapolis
Workshop on "New connections between dynamical systems and pde", American Institute of Mathematics, Palo Alto
Session on "Viscosity Solutions", 5th ICIAM, Sydney, Australia
Workshop on "Stochastic partial differential equations", MSRI and PIMS, Banff, Canada
Workshop on "Stochastic partial differential equations and applications", Warwick, UK
Workshop on "Reaction, diffusion and transport in inhomogeneous and stochastic media", Leipzig, Germany
University of Chicago, Applied Mathematics Seminar
International Conference on "Mathematics in Armenia: Advances and perspectives", Yerevan, Armenia
12th International Colloquium on "Numerical analysis and computer sciences with applications", Plovdiv, Bulgaria
University of Southern California (Colloquium)
Conference on "Geometrically based motions", IPAM, Lake Arrowhead.

2002

Conference on "Stochastic partial differential equations and applications", Levico, Italy

TMR-meeting on "Viscosity solutions and their applications" (plenary speaker), Tours, France
International Conference on "Scientific computing, partial differential equations and image processing", UCLA
Workshop on "Nonlinear models and analysis", Schroedinger Institute, Vienna, Austria
University of Vienna (Colloquium), Vienna, Austria
"Advances on nonlinear PDE" (plenary speaker), L'Aquila, Italy
Workshop on "Hamilton-Jacobi equations", Cortona, Italy
Congress de Mathematiques Appliques a la memoire de Jacques-Louis Lions, College de France, Paris, France
International Conference on "Differential and difference equations and their applications", Patras, Greece
Conference on "Nonlinear analysis", Institute of Mathematics, Academia Sinica, Taiwan
Conference on "Geometricaly based motions", IPAM, Lake Arrowhead
11th International Colloquium on "Numerical analysis and computer sciences with applications", Plovdiv, Bulgaria
"Viscosity solutions and related topics", RIMS, Kyoto University
Course on "Stochastic partial differential equations", Marseille, France
International Conference on "Scientific computing, partial differential equations and image processing", Hong Kong Baptist University, Hong Kong, PRC
California Institute of Technology (Colloquium)

2001

Tutorial on "Geometrically based motions" (5 lectures), IPAM, Los Angeles
Workshop on "Viscosity solutions and their applications" (Plenary speaker), Mallorca, Spain
Workshop on "Threshold dynamics and front propagation", IPAM, Los Angeles
Conference in honor of C. Dafermos, Brown University, Providence
Conference on "Geometrically based motions", IPAM, Lake Arrowhead
Workshop on "Viscosity methods in PDE" (4 lectures), PIMS, Vancouver, Canada
"Modern methods in Scientific Computing and Applications / Combustion", 40th session of "Seminaire de Mathematiques Superieures" (Keynote speaker - 4 lectures), Montreal, Canada
Workshop on "Fully Nonlinear PDE", Newton Institute, Cambridge, UK
Conference on "Stochastic PDE", Oberwolfach, Germany
Course on "Front Propagation and Homogenization" (8 lectures), Oberwolfach, Germany
International Conference on "Differential equations and dynamical systems with applications", Tibet
10th International Colloquium on "Differential Equations", Plovdiv, Bulgaria
Conference on "Nonlinear PDE", The Institute of Applied Mathematics and Mechanics of National Academy of Sciences of Ukraine, Kiev, Ukraine
Euroconference on "Asymptotic methods and applications in kinetic and quantum-kinetic theory" (Plenary speaker), Granada, Spain
Conference on "Viscosity solutions and related topics", RIMS, Kyoto University

2000

USA - Chile meeting on "Nonlinear Analysis", Vina del Mare, Chile
Symposium in "Stochastic processes" (short course - 5 lectures), Guanajuato, Mexico
Nonlinear Analysis 2000, a conference in honor of P. Rabinowitz, University of Wisconsin-Madison
"Viscosity solutions and control of evolution equations" (short course - 3 lectures), Bressanone, Italy
II simposio en "ecuaciones no lineales y problems de frontera libre", Buenos Aires, Argentina
Conference on "Mathematical analysis and its applications", Athens, Greece
Workshop on "Analytical and statistical approaches to fluids", Oberwolfach, Germany
Conference on "Singular perturbations in control theory", Adelaide, Australia

University of Massachussets - Amherst
Rutgers University
Purdue University
University of Toronto (Coloquium)

1999

International Conference on "Phase transitions in continuum media", Lisbon, Portugal
Conference on "Hyperbolic equations", Oberwolfach, Germany
Conference on partial differential equations, Oberwolfach, Germany
International Conference on nonlinear partial differential equations in memory of S. N. Kruzlkov, Besancon, France
Conference in honor of J. P. Schauder, Lviv, Ukraine
International Conference on "Free boundary problems: Theory and applications", Chiba, Japan
Conference on "Harmonic analysis and pde", Austin
Meeting on Nonlinear PDE, Tokyo Metropolitan University, Tokyo, Japan
University of Crete, Herakleion, Greece
Northwestern University

1998

UCLA, Mathematics Colloquium
UCLA, Analysis Seminar
meeting on "Phase transitions", Oberwolfach, Germany
79th Statistical Mechanic Conference, Rutgers University
Workshop on "Phase field models and surface effects", Cortona, Italy
Special session on Partial Differential Equations, AMS meeting, Chicago
University of Chicago, Applied Mathematics and Nonlinear PDE Seminar
Euroconference on "Front propagation" (3 Lectures), Herakleion, Greece
Summer School on "Viscosity solutions", Herakleion, Greece
University of Texas-Austin
Workshop on "Fully nonlinear PDE: Recent developments", (3 lectures), Instituto di Alta Matematica, Roma, Italy

1997

Princeton University, Applied Mathematics Colloquium
Mittag-Leffler Institute, Stockholm, Sweden
ETH, Zurich, Switzerland
SIAM meeting on "Material sciences", Philadelphia
Workshop on "Phase transitions: Microscopic and mesoscopic Theory"", Berlin, Germany
Conference on "Free boundary problems: Theory and applications", Herakleion, Greece

1996

US-Chinese conference on "Recent developments in differential equations and applications", Hangzhou, PRC
University of Tours, France
Ecole Federal Polytechnique de Lausanne (Colloquium), Lausanne, Switzerland
CMS seminar, University of Wisconsin-Madison
University of Wisconsin-Madison
Conference in Analysis, Herakleion, Greece
Conference on "Conservation laws", Oberwolfach, Germany
Conference in "Phase transitions", Tulane University, New Orleans
University of Chicago

Courant Institute, New York University
Tokyo Metropolitan University, Japan
Meeting on "Nonlinear PDE", Tokyo, Japan
Chuo University, Tokyo, Japan

1995

CIME course on "Viscosity solutions and their applications", Montecatini, Italy (6 lectures)
Meeting on "Generalized Stefan problems", Pavia, Italy
Meeting on "Nonlinear evolution problems", Rome, Italy
Meeting on "Free boundary problems: Theory and applications", Zakopane, Poland
Courant Institute, New York University
University of Wisconsin-Madison
Tel Aviv University (Colloquium), Tel Aviv, Israel
Hebrew University, Jerusalem, Israel
Weizmann Institute of Science (Colloquium), Rehovot, Israel
University of Maryland-College Park (Colloquium)
University of Maryland-College Park

1994

International Congress of Mathematicians (45 minute Invited Lecture), Zurich, Switzerland
International School of Mathematics, Santander, Spain (5 Lectures)
Courant Institute, New York University (Colloquium)
Courant Institute, New York University
Workshop on "Fine structure and phase transitions", SFB 256, University of Bonn, Germany
Conference on "Motion by mean curvature", Trento, Italy
71st Statistical Mechanics Meeting, Rutgers University
University of Wisconsin-Madison

1993

University of Michigan, Ann Arbor
Conference on "Nonlinear semigroups", Baton Rouge
Princeton University
Meeting on "Propagation of shocks", US Naval Academy, Annapolis
University of Tours, Tours, France
Workshop on "Front propagation", Ecole Normal Superieur, Paris, France
CNRS Laboratory, Orleans, France
ETH, Zurich, Switzerland
Workshop on "Singular perturbations", Trieste, Italy
University of Crete, Herakleion, Greece
University of Paris - Dauphine, France
Special session on "Nonlinear PDE", Annual AMS meeting, Merida, Mexico

1992

Carnegie Mellon University, Pittsburgh
Worcester Polytechnic Institute, Worcester
Chuo University, Tokyo, Japan
Hokaido University, Sapporo, Japan
Tokyo Metropolitan University, Tokyo, Japan
Waseda University, Tokyo, Japan
Conference on "Conservation laws", Oberwolfach, Germany
Conference on "Surface tension and motion by mean curvature", Trento, Italy
University of Crete, Herakleion, Greece

Special Session on "Convergence analysis for stochastic systems", SIAM meeting in Control, Minneapolis
Midwest PDE meeting, Purdue University
Workshop on "PDE and control", Temple University, Philadelphia

1991

Hour speaker, AMS meeting, Philadelphia
Workshop on "Phase transitions", Carnegie Mellon University
University of Chicago
Brown University
University of California-Santa Barbara (5 Lectures)
Workshop on "Evolving phase boundaries", Carnegie Mellon University
Conference on "Hamilton-Jacobi equations", Castiglione della Pescaia, Italy
Scuola Normala Superiore, Pisa, Italy
University of Padova, Padova, Italy (2 Lectures)
University of Rome (I), Rome, Italy
University of L'Aquila, L'Aquila, Italy

1990

College de France
Conference on "Nonlinear variational problems", Elba, Italy
University of California-Berkeley
University of Massachusetts-Amherst
Worcester Polytechnic Institute
University of Wisconsin-Madison
Princeton University
University of Paris-Dauphine, Paris, France
University of Crete, Herakleion, Greece

1989

Summer School on PDE, University of Crete, Herakleion, Greece, (5 Lectures)
UCLA (2 Lectures)
University of California-Santa Barbara
University of Wisconsin-Madison
Rutgers University

1988

Conference on "Nonlinear evolution equations‘", Visegrad, Hungary
NSF - CBMS Conference on "Weak convergence", Loyola University, Chicago, IL
Institute for Advanced Study, Princeton, (2 Lectures)
University of Kentucky

1987

Summer School on PDE, Santander, Spain
2nd Howard University Symposium, Washington, DC
EQUADIFF '87, Xanthi, Greece
Conference on "Stochastic control and PDE", Ecole Normal Superieure, Paris, France
The Pennsylvania State University
Courant Institute, New York University
Carnegie Mellon University

1986

Conference on “Nonlinear PDE”, L’Aquila, Italy
Conference on “Hamilton-Jacobi equations”, University of Arkansas, Fayetteville
NATO Conference on “Dynamical systems”, Lisbon, Portugal
Workshop on “Stochastic control theory”, IMA, Minneapolis
Session on “Viscosity solutions in optimal control”, 25th IEEE-CDC, Athens, Greece
University of Maryland-College Park
Purdue University
Loyola University, Chicago

1985

Workshop on Semigroups, ICTP, Trieste, Italy (5 Lectures)
Workshop on “Large deviations”, IMA, Minneapolis
Special session on ”Recent advances in nonlinear hyperbolic equations”, Ann. meeting, AMS, New Orleans
Ecole Normal Superieure, Paris, France
Northwestern University
University of Wisconsin-Madison
University of Maryland-College Park

1984

Special Session on ”PDE’s and optimal control problems”, Annual meetings, AMS, Louisville
AMS-SIAM summer seminar, Santa-Fe, New Mexico
Autumn School on Semigroups, International Center for Theoretical Physics, Trieste, Italy
Ecole Normal Superieure, Paris, France
University of Maryland-College Park
University of Minnesota, Minneapolis
University of Genoa, Genoa, Italy
Scuola Normala Superiore, Pisa, Italy
University of Rome I, Rome, Italy