CURRICULUM VITAE

Thaleia Zariphopoulou
Presidential Chair in Mathematics
and
V. F. Neuhaus Centennial Professor of Finance
Departments of Mathematics and
IROM, McCombs School of Business
The University of Texas at Austin

EDUCATION

Ph.D. Applied Mathematics, Brown University, 1989
M.S. Applied Mathematics, Brown University, 1985
B.A. Electrical Engineering, National Technical University of Athens, Greece, 1984

AREA OF SPECIALIZATION

Mathematical Finance, Stochastic Optimization,
Quantitative Business and Artificial Intelligence

EMPLOYMENT

Academic Positions

The University of Texas at Austin, Presidential Chair in Mathematics, 2012-present
University of Oxford, Oxford-Man Professor of Quantitative Finance, Oxford-Man Institute and Mathematical Institute, Student of Christ Church College, 2009-2012
The University of Texas at Austin, V. F. Neuhaus Centennial Professor, 1999-present
University of Wisconsin-Madison, Laun Associate Professor of Business and Associate Professor of Mathematics, 1995-2000
University of Wisconsin-Madison, Associate Professor of Business and Mathematics, 1994-1995
University of Wisconsin-Madison, Assistant Professor of Business and Mathematics, 1991-1994
Worcester Polytechnic Institute, Assistant Professor, 1989-1991
Brown University, Teaching Fellow, 1987-1988

Visiting Positions

University of Oxford, Visiting Professor, 2014-present
Columbia University, FDT Research Center, Affiliate Member, 2017-2020
Distinguished Visiting Professor, Imperial College, May 2016
Oxford-Man Institute, University of Oxford, Associate Member, 2012-present
University of Paris IX-Dauphine, Visiting Professor, May 1999, 2001
Isaac Newton Institute, Cambridge, England, Visiting Scholar, Spring 1995
Brown University, Visiting Assistant Professor, 1988-1989

HONORS AND AWARDS

- Oxford-Man Statutory Chair in Quantitative Finance, University of Oxford, 2009-2012
- Presidential Chair in Mathematics, The University of Texas at Austin, 2012-present
- V. F. Neuhaus Centennial Professorship, The University of Texas at Austin, 1999-present
- SIAM (Society of Industrial and Applied Mathematics) Fellow, elected in 2012
- Career Award for Outstanding Research Contributions, McCombs School of Business, The University of Texas at Austin, 2021
- Romnes Fellowship, University of Wisconsin-Madison, 1997-2000
- Laun Professorship of Finance, University of Wisconsin-Madison, 1995-2000
- President (2006-2008) of the Bachelier Finance Society
- Alfred P. Sloan Foundation Fellowship, 1995-1997

- International Congress of Mathematicians, Invited talk, Seoul, 2014

PUBLICATIONS

1. Investment-consumption models with transaction costs, Proceedings of the 29th IEEE Conference Decision and Control, Honolulu, HI (1990).
2. An optimal investment-consumption model with borrowing (with W.H. Fleming), *Mathematics of Operations Research* 16 (1991) 802-822.
3. Consumption-investment models with constraints, Proceedings of the 30th IEEE Conference on Decision and Control, Brighton, England, (1991) 1311-1316.
4. Investment-consumption models with transaction fees and Markov-chain parameters, *SIAM Journal on Control and Optimization* 30 (1992) 613-636.
5. Pricing options with transaction costs (with M. H. A. Davis and V. Panas), Proceedings of International Conference in Finance, ESSEC-AFFI, Paris, France (1992).
6. Optimal investment with undiversifiable income risk (with D. Duffie), *Mathematical Finance* 3 (1993) 135-148.
7. European option pricing with transaction costs (with M. H. A. Davis and V. Panas), *SIAM Journal on Control and Optimization* 31 (1993) 470-493.
8. Asymptotic results for long term investments (with C. F. Huang), Proceedings of International Conference in Finance, ESSEC-AFFI, La Baule, France (1993).
9. Consumption and investment models with constraints, *SIAM Journal on Control and Optimization* 32 (1994) 59-85.
10. Numerical schemes for investment models with singular transactions (with A. Tourin), *Computational Economics* 7 (1994) 287-307.
11. American options and transaction fees (with M. H. A. Davis), in Mathematical Finance, Springer-Verlag, (1995).
12. Portfolio selection with transaction costs (with A. Tourin), *Progress in Probability* 36 (1995) 385-391.
13. Optimal environmental management in the presence of irreversibilities (with J. Scheinkman), Proceedings of Fondazione Eri Enrico Mattei, Nota di Lavorno 15 (1996).
14. Optimal consumption and investment when investment opportunities are better for the rich than for the poor (with H. Koo), Proceedings of International Conference in Finance, AFFI, Geneva, Switzerland (1996).
15. Hedging in incomplete markets with HARA utility (with D. Duffie, W. H. Fleming and H. M. Soner), *Journal of Economic Dynamics and Control* 21 (1997) 753-782.
16. Viscosity solutions and numerical schemes for models with singular policies (with A.

Tourin), in *Numerical Methods in Finance*, Newton Institute, Cambridge University Press (1997) 245-269.

17. Optimal consumption and portfolio choice with borrowing constraints (with J. L. Vila), *Journal of Economic Theory* 7 (1998) 402-431.
18. Pricing Models with transaction fees (with J. E. Hodder), *Stochastic Analysis, Control, Optimization and Applications*: a volume in honor of W.H. Fleming, W.M. McEneaney, G.Yin and Q. Zhang (eds.), in Systems and Control: Foundations and Applications, Birkhäuser, Boston (1999) 567-584.
19. Turnpike behavior of long-term investments (with C.F. Huang), *Finance and Stochastics* 2 (1999) 1-20.
20. Bounds on prices of contingent claims in an inter-temporal economy with proportional transaction costs and general preferences (with G. Constantinides), *Finance and Stochastics* 3 (1999) 345-369.
21. Comment on "The valuation of contingent claims under portfolio constraints: Reservation buying and selling prices", *European Finance Review* 3 (1999) 389-392.
22. Optimal investment and consumption models with nonlinear stock dynamics, *Mathematical Methods of Operations Research* 50 (1999) 271-296.
23. Transaction costs in portfolio management and derivative pricing, Introduction to Mathematical Finance, Symposia in Applied Mathematics, AMS, D. Heath and R. Swindle (eds.) (2000) 101-164.
24. On level curves of value functions in optimization models of expected utility (with C. Tiu), *Mathematical Finance* 10 (2000) 323-338.
25. Asset valuation with unhedgeable risks, Proceedings of Conference on Decision and Control (2000) 18-27.
26. Computation of distorted probabilities for diffusion processes via stochastic control methods (with V. Young), *Insurance: Mathematics and Economics* 27 (2000) 1-18.
27. Numerical schemes for variational inequalities arising in international asset pricing (with J.E. Hodder and A. Tourin), *Computational Economics* 17 (2001) 43-80.
28. A solution approach to valuation with unhedgeable risks, *Finance and Stochastics* 5 (2001) 61-82.
29. Free boundary problems in asset pricing, Complementarity: applications, algorithms and extensions, M.C. Ferris, O.L. Mangasarian and J.-S. Pang (eds.), Kluwer Academic Publishers (2001) 104-136.
30. Bounds on derivative prices in an inter temporal setting with proportional costs and multiple securities (with G. Constantinides), *Mathematical Finance* 11 (2001) 331-346.
31. Environmental models with irreversible decisions (with J. Scheinkman), *Journal of Economic Theory* 96 (2002) 180-207.
32. Pricing dynamic insurance risks: an expected utility approach (with V. Young), *Scandinavian Actuarial Journal* 4 (2002) 16-30.
33. Stochastic control methods in asset pricing, Handbook of Stochastic Analysis and Applications, D. Kannan and V. Lakshmikantham (eds.), Marcel Dekker (2003) 102-145.
34. Pricing early exercise claims in incomplete markets (with A. Oberman), *Computational Management Science*, 1 (2003) 75-107.
35. A wealth-dependent investment opportunity set: its effects on optimal consumption and portfolio decisions (with S. Choi, H.-K. Koo and G. Shim), *Annals of Economics and Finance*, 4 (2), (2003) 427-469.
36. An example of indifference prices under exponential preferences (with M. Musiela), *Finance and Stochastics*, 8 (2004) 229-239.
37. A valuation algorithm for indifference prices in incomplete markets (with M. Musiela), *Finance and Stochastics*, 8 (2004) 399-414.
38. Indifference prices of early exercise claims (with M. Musiela), Contemporary

Mathematics, American Mathematical Society, 351, Proceedings of the AMS-IMS-SIAM Joint Summer Research Conference on Mathematics of Finance, G. Yin and Q. Zhang (eds.), AMS, (2004) 259-272.

39. Bounds and asymptotic approximations when volatility is random (with R. Sircar), *SIAM Journal on Control and Optimization*, 43 (2005), 1328-1353.
40. Pricing Insurance via Stochastic Control: optimal consumption and terminal wealth (with V. Young), *Finance*, 25 (2005), 141-155.
41. Dynamic asset allocation and consumption choice in incomplete markets (with S. Stoikov), *Australian Economic Papers*, 44(4), (2005), 414-454.
42. Investment and valuation under backward and forward dynamic exponential utilities in a stochastic factor model (with M. Musiela), *Advances in Mathematical Finance*, (2007), 303-334.
43. Utility valuation of Credit Derivatives: Single and two-name case (with R. Sircar), *Advances in Mathematical Finance*, (2007), 279-301.
44. Credit Derivatives and risk aversion (with T. Leung and R. Sircar), *Advances in Econometrics* (2008), 275-291.
45. On maturity-independent risk measures (with G. Zitkovic), *Proceedings of 47^{th} IEEE Conference on Decision and Control* (2008), 5569-6501.
46. Options: current perspectives, *The New Palgrave Dictionary of Economics*, 2^{nd} Edition, S. N. Durlauf and L. E. Blume (eds.), (2008).
47. Investment performance measurement under asymptotically linear risk tolerance (with T. Zhou), *Handbook of Numerical Analysis*, P. G.Ciarlet (ed.), (2009), 227-253.
48. Portfolio choice under dynamic investment performance criteria (with M. Musiela), *Quantitative Finance*, 9(2), (2009), 161-170.
49. Derivative pricing, investment management and the term structure of exponential utilities: The case of binomial model (with M. Musiela), *Indifference Pricing*, R. Carmona (ed.), Princeton University Press, (2009), 3-41.
50. Optimal asset allocation in a stochastic factor model – an overview and open problems, *RADON Series on Computational and Applied Mathematics*, Advanced Financial Modeling, A. Hansjorg, W. Runggaldier and W. Schachermayer eds., 8 (2009), 427-453.
51. Utility valuation of Credit Derivatives and applications to CDOs (with R. Sircar), *Quantitative Finance*, 10 (2010), 195-208.
52. Indifference valuation in incomplete binomial models (with M. Musiela and K. Sokolova), *Mathematics in Action*, 3(2), (2010), 1-36.
53. Portfolio choice under space-time monotone performance criteria (with M. Musiela), *SIAM Journal on Financial Mathematics*,1 (2010), 326-365.
54. Maturity-independent risk measures (with G. Zitkovic), *SIAM Journal on Financial Mathematics*,1 (2010), 266-288.
55. Stochastic partial differential equations and portfolio choice (with M. Musiela), *Contemporary Quantitative Finance*, Springer-Verlag, (2010), 195-215.
56. Initial investment choice and optimal future allocations under time-monotone performance criteria (with M. Musiela), *International Journal of Theoretical and Applied Finance*, 14(1) (2011), 61-81.
57. Forward indifference valuation of American options (with T. Leung and R. Sircar), *Stochastics* 84(5-6), (2012), 741-770.
58. An approximation scheme for the solution of the optimal investment problem in an incomplete market (with S. Nadtochiy), *SIAM Journal on Financial Mathematics*, 4(1), (2013), 494-538.
59. A class of homothetic forward investment performance processes with non-zero volatility (with S. Nadtochiy), *Inspired by Finance*, Springer-Verlag, (2013), 475-505.
60. On the optimal wealth process in a log-normal market: applications to risk management

(with P. Monin), *Journal of Financial Engineering*, 1(2), (2014).

61. Stochastic modeling and methods in portfolio management, *Proceedings of the International Congress of Mathematicians*, Seoul (2014).
62. Forward performance processes in incomplete markets and ill-posed HJB equations (with M. Shkolnikov and R. Sircar), *SIAM Journal on Financial Mathematics,* 7, (2016), 588-618.
63. Forward exponential indifference valuation in an incomplete binomial model (with M. Musiela and E. Sokolova), *Advanced Modeling in Mathematical Finance,* In honor of E. Eberlein, Springer Proceedings in Mathematics and Statistics, (2016), 277-302.
64. Portfolio optimization and stochastic volatility asymptotics (with J.-P. Fouque and R. Sircar), *Mathematical Finance,* 27(3), (2017), 704-745.
65. Representation of homothetic forward performance processes via ergodic and infinite horizon quadratic BSDE in stochastic factor models (with G. Liang), *SIAM Journal on Financial Mathematics,* 8(1), (2017), 344-372.
66. Dynamically consistent investment criteria under model uncertainty: the robust forward criteria (with S. Kallblad and J. Obloj), *Finance & Stochastics* 22(4), (2018), 879-918.
67. An ergodic BSDE approach to forward entropic risk measures: representation and large-maturity behavior (with W.F. Chong, Y. Hu and G. Liang), *Finance & Stochastics,* 23(1), (2019), 239-273.
68. Optimal contract for a fund manager with capital injections and endogenous trading constraints (with S. Nadtochiy), *SIAM Journal in Financial Mathematics,* 10(3), (2019), 698-722.
69. Mean field and N-agent games for optimal investment under relative performance concerns (with D. Lacker), *Mathematical Finance,* 29(4), (2019), 1003-1038.
70. An approximation scheme for semi-linear parabolic PDEs with convex and coercive Hamiltonians (with S. Huang and G. Liang), (2019), *SIAM Journal on Optimization and Control,* 58(1), (2020), 165-191.
71. Predictable forward performance processes: The binomial case (with B. Angoshtari and X. Y. Zhou), *SIAM Journal on Optimization and Control,* 58(1), (2020), 327-347.
72. Exploration versus exploitation in continuous time: a relaxed control approach (with H. Wang and X.Y. Zhou), (2019), *Journal of Machine Learning Research*, 21, (2020), 1-34.
73. Personalized robo-advising: an interactive investment process (with A. Capponi and S. Olafsson), *Management Science,* 68(4), September 13, 2021 (online).
74. Computational Medicine, the Present and the Future: Obstetrics and Gynecology Perspectives, (with R. Bukowski, K. Schulz, K. Stephens, D. Semeraro, J. Drake, G. Smith, C. Cordola, T. Hughes, C. Zarins, D. Kusnezov and T. Oden), *American Journal of Obstetrics and Gynecology,* 224(1), (2021), 16-34.
75. Forward rank-dependent performance criteria: time-consistent investment under probability distortions (with X. He and M. Strub), *Mathematical Finance,* 31(2), (2021), 683-721.
76. In Memoriam: Mark H.A. Davis and his contributions to mathematical finance (with J. Obloj), *Mathematical Finance,* 31(4), (2021), 1099-1110.
77. N-player and mean-field games in Ito-diffusion markets with competitive or homophilous interaction (with R. Hu), *"Stochastic Analysis, Filtering, and Stochastic Optimization*, Springer-Verlag, (Eds. G. Yin and T. Zariphopoulou), Springer-Verlag, (2022), 209-237.
78. Entropy regularization for mean field games with learning (with X. Guo and R. Hu), *Mathematics of Operations Research,* 2022, published online, 3239-3260, February 25, 2022.
79. Competition in fund management under forward relative performance criteria (with T. Geng and M. Anthropelos), *SIAM Journal in Financial Mathematics (SIFIN),* 13(4), (2022), 1271-1320.

80. On the analyticity of the value function in optimal investment (with O. Mostovyi and M. Sirbu), (2023), *Pure and Applied Functional Analysis,* in print.
81. Mean field games with unbounded controlled common noise in portfolio management (with P. E. Souganidis), (2023), submitted for publication.
82. Representation of forward performance criteria with random endowment via FBSDE and application to forward optimized certainty equivalent (with G. Liang and Y. Sun), (2023), submitted for publication; https://arxiv.org/abs/2401.00103.
83. Mean field games under forward performance criteria in Ito diffusion markets, submitted for publication.
84. Decision making under costly sequential information acquisition: the paradigm of reversible and irreversible decisions (with R. Xu and L. Zhang), (2023), submitted for publication; https://arxiv.org/abs/2401.00569.

PREPRINTS AND WORK IN PROGRESS

1. Turnpike portfolios in Ito diffusion markets under forward performance criteria (with T. Geng), preprint
2. Gatheral's model: revision, reformulation, and extensions (with M. Musiela), preprint
3. How to choose a model under model uncertainty: a consequentialism approach (with M. Strub), preprint
4. Optimal execution of multi-orders and their stochastic characteristics (with M. Musiela), preprint
5. On Black's equation for the risk tolerance function (with S. Kallblad), preprint
6. Working with the wrong model: consequences and dynamic regret metrics (with H. Wang), preprint
7. Adaptive model updating under forward performance criteria: the paradigm of optimal order execution (with H. Wang), preprint

8. Optimal information acquisition and stochastic control with partial information acquisition (with P. Souganidis)
9. Solving FBSDE arising in forward performance criteria with random endowments (with G. Liang and Y. Sun)
10. Costly information acquisition and mean-field games (with P. Souganidis and R. Xu)
11. Personalized wealth management in lognormal markets (with H. Yan)

BOOKS, MONOGRAPHS and VOLUMES

1. *Inspired by Finance*, (Eds. with Y. Kabanov and M. Rutkowski), Spinger-Verlag, 2013.
2. *Stochastic Analysis and Applications*, (Ed. with D. Crisan and B. Hambly), Springer -Verlag, 2014.
3. *"Contribution to M.H.A. Davis", Mathematical Finance,* (Ed. with J. Obloj), Wiley, 2021.
4. *"Stochastic Analysis, Filtering, and Stochastic Optimization,* (Ed. with G. Yin), Springer-Verlag, 2022.
5. *Advances in Forward Performance Processes, Probability, Uncertainty and Quantitative Risk*, (Ed. with G. Liang), forthcoming, 2024.

INVITATIONS

2024
Mathematical Finance Seminar, University of Oxford
"New trends and challenges in stochastic differential games", Banff International Research Center (BIRS), Banff
"Methods for solving and analyzing dynamic models in the phase of uncertainty and cross-sectional heterogeneity", IMSI, University of Chicago
University of Edinburgh
University of Miami
7th Berlin Workshop in Mathematical Finance, plenary speaker, Humboldt University, Berlin
"Modeling, Learning and Understanding: Modern Challenges between Financial Mathematics, Financial Technology and Financial Economics", BIRS, Banff
Mathematical Finance Seminar, Columbia University
Conference on Stochastic Analysis, University of Rennes
Oden Institute, UT-Austin
Mathematics Colloquium, USC

2023
"Finance and Artificial Intelligence", plenary speaker, Fields Institute, University of Toronto
"Machine learning in stochastic environments through the lens of quantitative finance", BIRS, Banff
"Advances in Quantitative Finance", City University of Hong Kong, Hong Kong
Mathematics Colloquium, IIT
Distinguished Van Eenam Lecture Series, University of Michigan, Ann Arbor
11th Advanced Mathematical Methods in Finance (AMaMeF), plenary speaker, Bielefeld
11th Western Conference in Mathematical Finance (WCMF), plenary speaker, University of California, Berkeley
Mathematical Finance Seminar, Oxford University
Workshop in Financial Mathematics, Princeton University
SIAM Conference in Financial Mathematics, Philadelphia
"Broad Directions in Mathematical Finance", plenary speaker, Rutgers University
Fields-CFI Conference on "Recent Advances in Mathematical Finance", plenary speaker, Fields Institute, University of Toronto

2022
Machine Learning in Finance, Global seminar, Bachelier Finance Society (online)
"Mean field games", semester-long program on "PDEs and probability", CMR (Center for Mathematical Sciences), Montreal
Distinguished Lecture in Quantitative Finance, Chinese University of Hong Kong
"9th International Colloquium on Backward Stochastic Differential Equations and Mean Field Systems", Plenary speaker, University of Annecy, Annecy
"Decision making and uncertainty", semester-long program, Institute for Mathematical and Statistical Innovation (IMSI), University of Chicago
Meeting on "Stochastic Control and Applications", Imperial College, London
Mathematical Finance seminar, Columbia University
Mathematical Finance seminar, Princeton University
Oxford-Princeton Workshop in Financial Mathematics, University of Oxford
Conference in memory of Tomas Bjork, Stockholm School of Economics, Stockholm Sweden

Distinguished Sir Michael Atiyah Lecture, Maxwell Institute, University of Edinburgh
Meeting of Greek Women in Mathematics, National Technical University of Athens
11th World Congress of the Bachelier Finance Society, Hong Kong
Meeting on "Dynamic preferences and multivariate risks", plenary speaker, University of Nantes, Nantes

2021
Keynote speaker, Annual JMM (Joint Mathematics Meetings), American Mathematical Society, Washington, DC
Keynote speaker, 10th Western Conference in Mathematical Finance, UC, Santa Barbara
"Decision making in health and medical care", IMSI, University of Chicago "Introduction to decision making under uncertainty", IMSI, University of Chicago
SIAM Global seminar in Financial Mathematics (online)
Plenary address, 2nd International Conference on Artificial Intelligence in Finance (online)
Mathematical Finance Seminar, University of Oxford
Oden Institute, UT-Austin
SIAM Conference on Financial Mathematics and Engineering, Chicago
Workshop on mean field games, IMSI, University of Chicago

2020
INFORMS, Annual Meeting- (online)
"High dimensional Hamilton-Jacobi PDEs", Institute of Pure and Applied Mathematics, UCLA
Conference in Mathematical Finance for Young Researchers, Rutgers University
Mathematical Finance Seminar, Princeton University
Owen's Lecture distinguished speaker, Wayne State University, Detroit
BIRS Workshop on "Stochastic Analysis, Mathematical Finance and Economics, Banff, Canada - postponed
Workshop on "Modeling, learning and understanding: modern challenges in Financial Mathematics", BIRS, Banff, Canada - postponed
Conference in Financial Mathematics, Imperial College, UK - postponed
Alan Turing Institute, London, postponed
University of Illinois, Urbana Champaign - postponed
Rice University, Colloquium - postponed
SUSTECH, China - postponed
National Technical University of Athens, Athens
SIAM Texas-Louisiana Annual Meeting, plenary speaker, (online)
Mathematical Finance Seminar, University of Oxford, (online)
Mathematical Finance seminar, Columbia University, New York
Mathematics Colloquium, Johns Hopkins University
Actuarial mathematics seminar, University of Illinois, Urbana Champaign
Mathematical finance seminar, University of Oxford

2019
3rd Tianfu Conference in Finance, Chengdu, China
3rd International Congress in Actuarial Sciences and Quantitative Finance, Manizales
Workshop in Financial Mathematics, plenary speaker, University of Siena
"Dynamics, Equations and Applications", plenary speaker, Polish Academy of Sciences, Krakow
SIAM Conference in Financial Mathematics and Engineering, Toronto

2018
Workshop in Financial Mathematics, Imperial College
Mathematical Finance Seminar, Oxford University
Mathematical Finance Seminar, Columbia University
Boeing Colloquium, University of Washington, Seattle
Humboldt University, Berlin, Germany
De Finetti Risk Seminar, University of Milan, Milan
Colloquium, University of Munster, Munster
University of Warwick, Warwick, UK
"Stochastic analysis and its applications", BIRS, Oaxaca, Mexico
"Symposium on optimal stopping", Rice University
"Workshop in honor of S. Howison", University of Oxford
International Congress of the Hellenic Mathematics Society, Athens
"Mathematics and Economics: Trends and Explorations", ETH, Zurich
"Advanced methods in Mathematical Finance", Angers
"Financial and Economic Applications", Institute of Mathematics and its Applications, University of Minnesota, Minneapolis
Summer School on Mean-Field Games, IPAM, UCLA
Computational Health Conference, Dell Medical School, Austin
9^{th} Western Conference in Mathematical Finance, USC

2017
Workshop on "BSDE and Financial Mathematics", plenary speaker, King's College, UK
Columbia University
Meeting of Women in Mathematical Finance, IPAM, UCLA
WCMF 2017, University of Washington, Seattle, WA
Probability Colloquium, Brown University
Robust methods in Probability and Finance, ICERM, Providence
"International workshop on BSDE, SPDE and their applications", plenary speaker and tutorial speaker, Edinburgh, UK
"Stochastic dynamical models", Bernoulli Center, Lausanne, Switzerland
Brazilian Mathematics Colloquium 2017, plenary speaker, Rio Janeiro, Brazil
"Mean-field games and their applications", IPAM, UCLA
"Advances in Stochastic Analysis for Risk Modeling, CIRM, Marseille, France
Conference on Kinetic Theory, Austin, TX
Conference in Financial Mathematics, Lake Arrowhead, IPAM, UCLA

2016
PIMS, Rio de Janeiro
ETH, Zurich
EPFL, Lausanne
Conference on Stochastic Processes, Plenary lecture, U. Maryland
AMS Sectional Meeting, Athens, GA
Stochastic Analysis and Mathematical Finance - A Fruitful Partnership, BIRS, Oaxaca
Summer School Tutorial, Financial Mathematics, University of Alberta, Canada
Conference in Financial Mathematics, University of Michigan, Ann-Arbor
National University of Singapore, Singapore
Northwestern University, Evanston
Imperial College, London
SIAM Conference in Financial Mathematics, UT-Austin

2015
Bachelier Colloquium, Plenary speaker, Metabief, France
University of Michigan, Ann Arbor
"New trends and applications of Differential Equations and Dynamical Systems", Tutorial, University of Buenos Aires, Argentina
"Broad Perspectives and New Directions in Financial Mathematics", Tutorial, UCLA, IPAM
Inaugural Meeting of Women in Mathematical Finance, IPAM, UCLA
Culminating Workshop, IPAM, UCLA
Financial Mathematics Colloquium, King's College, London
University of Minnesota, Minneapolis
UCLA, Applied Math Colloquium
Workshop on Options, PIMS, Rio de Janeiro, Brazil
Oxford-Princeton Conference, Princeton
Mathematical Finance Seminar, Oxford University
International Conference on Stochastic Analysis and Applications, Plenary talk, Hammamed, Tunisia

2014
International Congress of Mathematicians, Invited Lecture, Seoul, 2014
Ecole Polytechnique, Paris, France
Bachelier Seminar, Paris, France
SIAM Conference in Financial Mathematics and Engineering, Chicago
Hong Kong Consortium in Quantitative Finance, Hong Kong
WCMF 2014, University of California, Santa Barbara
Thematic program "Mathematics of Systemic Risk", PIMS, Vancouver, Canada
"Mathematical Finance: Arbitrage and Portfolio Optimization", Banff International Research Station, Banff, Canada
Meeting on "Robust Management in Finance", Paris, France
"New directions in Financial Mathematics and Mathematical Economics", Banff International Research Station, Banff, Canada
University of Piraeus, Piraeus, Greece
Princeton University

2013
WCMF 2013, University of California, Berkeley
Meeting to honor the 70th birthday of G. Papanicolaou, Stanford University, Palo Alto
Meeting on "Dynamic interactions and market equilibrium", Crete, Greece
Chinese University of Hong Kong, Hong Kong
Fields Institute, Commodities, Energy and Environmental Finance, Toronto, Canada
Meeting on "Stochastics and Finance" (plenary lecture), Angers, France
Workshop in Mathematical Finance, Zurich, Switzerland

2012
"Probability, Control and Finance", conference to honor I. Karatzas's 60th birthday, Columbia University
Course on "Asset allocation and utility theory", Summer School on Stochastic Finance, University of Athens, Athens, Greece
Summer School on Mathematical Finance, Lisbon, Portugal
Workshop on "Finance and Partial Differential Equations", Yerevan, Armenia
Workshop on "Perspectives in Analysis and Probability", (plenary lecture), ETH, Zurich

2011
University of Heidelberg, Heidelberg, Germany (public lecture and Math Colloquium)
6th Bachelier Colloquium, Metabief, France
Princeton University, Princeton, NJ
University of Cambridge, Cambridge, United Kingdom
Workshop on SPDE and applications, Le Mans, France
London School of Economics, London, United Kingdom
Women in Applied Mathematics Workshop, Crete, Greece
4th Western Conference in Mathematical Finance, USC, CA
International Conference on Mathematical Finance and Economics, Istanbul, Turkey
Conference on Financial Mathematics, Al-Akhawayn, Morocco
Stochastic Processes and their Applications, Oxaca, Mexico

2010
Workshop on "New directions in Mathematical Finance", IPAM, Los Angeles
Workshop on "Foundations of Mathematical Finance", Fields Institute, Toronto, Canada
5th Bachelier Colloquium, Metabief, France
Heriot-Watt University, Edinburgh, United Kingdom
King's College, London, United Kingdom
University of Leipzig, Leipzig, Germany
Stanford University, Palo Alto, CA
Oxford-Columbia Workshop in Financial Mathematics, New York
Conference on "Stochastic Processes and their applications", Osaka, Japan
6th Oxford-Princeton Workshop on Financial Mathematics and Stochastic Analysis, Oxford, United Kingdom
International Research Forum, Hong Kong
Meeting on "Partial Differential Equations and Finance", Rutgers University

2009
AMS National Meeting, Washington
5th Oxford-Princeton Workshop on Financial Mathematics and Stochastic Analysis, Princeton
Meeting on "Advanced Mathematical Methods in Finance", Alesund, Norway
PDE and Mathematical Finance, Stockholm, Sweden
3rd WCMF, University of California, Santa Barbara, California
Northwestern University, Evanston, Illinois
Illinois Institute of Technology, Chicago, Illinois
Meeting on "Quantitative Methods in Finance", Sydney, Australia

2008
AMS National Meeting, San Diego
University of Oxford
Conference on "Stochastic Analysis in Finance and Insurance", Oberwolfach, Germany
Brown University
CBMS-NSF Conference in Mathematical Finance, University of California, Santa Barbara
5th European Congress of Mathematicians, Amsterdam, Holland
5th World Congress of the Bachelier Finance Society, London, UK
Kick-off Workshop, Special semester on Stochastics with emphasis in Finance, RICAM, Linz, Austria
International Congress on Price, Liquidity and Credit Risks, Konstanz, Germany
Dahlem Conference, Humboldt University, Berlin, Germany
SIAM Conference on Control and Optimization, Cancun, Mexico

2007
6th Winter School in Financial Mathematics (tutorial lectures), Lunteren, Netherlands
Conference on ‘Recent Developments in Financial and Insurance Mathematics and the interplay with the industry’, Oberwolfach, Germany
Western Consortium in Quantitative Finance (WCMF), Stanford University
Kent-Purdue Mini-Symposium on Financial Mathematics, Kent State University
Meeting on “Financial Engineering and Financial Mathematics”, University of Michigan, Ann Arbor
Workshop in Financial Mathematics, International Center for Mathematical Sciences, Edinburgh
Meeting on “Advanced Mathematical Methods in Finance”, Vienna, Austria
University of Technology, Vienna, Austria
Princeton University
Fields Institute, Toronto, Canada
Quantitative Methods in Finance Conference, Sydney, Australia

2006
Symposium on Optimal Stopping and Applications, University of Manchester, England
Bachelier Seminar, Paris VI, Paris, France
Conference in Honor of S. Sethi, The University of Texas at Dallas
Workshop in Mathematical Finance and insurance, Lijiang, China
Conference on Markov Processes and related topics, University of Wisconsin, Madison, WI
Workshop on ‘Discontinuous change in behavior issues in PDEs’, Anogia, Greece
Fourth World Congress of the Bachelier Finance Society (Plenary Lecture), Tokyo, Japan
Southeast Actuarial Forum, Dallas
University of California, Santa Barbara
Mathematical Finance, 60th Birthday Conference in Honor of D, Madan, University of Maryland, College Park
Southern Africa Mathematical Sciences Association 2006 Conference, Botswana

2005
Workshop on Financial Mathematics, Carnegie Mellon University, Pittsburg, PN
Stochastic Modeling, Center for Mathematical Research, University of Montreal, Montreal, Canada
SIAM Conference on Control and Optimization (plenary lecture), New Orleans, LA
Annual Meeting of the Association of Women in Mathematics, New Orleans, LA
Meeting on Free Boundary problems and Applications,
Di Tella Unniversity, Buenos Aires, Argentina
Workshop on PDEs and Mathematical Finance, KTH, Stockholm, Sweden
Opening Workshop on Mathematics, Statistics and Econometrics, SAMSI, NC
Workshop on Credit Risk, SAMSI, University of North Carolina

2004
Workshop on Mathematical Finance, Humboldt University of Berlin, Berlin, Germany
Program on Tools for Modeling and Data Analysis in Finance and Asset Pricing (plenary lecture), Institute of Mathematics and its Applications, Minneapolis, MN
Cornell University, Ithaca, NY
University of Southern California, Los Angeles, CA
University of Michigan, Ann Arbor, MI
Imperial College, London, England
Meeting in Mathematical Finance, Yellow Mountain, China

2003
Western Finance Association Meeting, Los Cabos, Mexico
AMS-IMS-SIAM Joint Summer Research Conference in Mathematical Finance, Snowbird, UT
Workshop on Probability and Partial Differential Equations in Modern Applied Mathematics, IMA, Minneapolis, MN
Columbia University, New York, NY
Stochastic Analysis in Finance and Insurance, Oberwolfach, Germany
Princeton University
Numerical probabilistic methods for high-dimensional problems in finance, American Institute of Mathematics, Research Conference Center, Palo Alto, CA
Summer School in Economics and Finance, Samos, Greece

2002
Stanford University, Palo Alto, CA
Columbia University, New York, NY
Conference on Quantitative Methods in Finance (plenary speaker), QMF'02, Sydney, Australia
Conference on Risk and Insurance (plenary speaker), Samos, Greece
Bachelier Seminar, University of Paris VI, Paris, France
Invited hour lecture at AMS Meeting at University of Michigan, Ann Arbor, MI
Technical University of Vienna, Vienna, Austria
Athens University of Economics and Business, Athens, Greece
Special session on "Viscosity solutions and their applications", AMS Meeting, Pisa, Italy
10th International Colloquium on Numerical Analysis and Computer Sciences and Applications, Plovdiv, Bulgaria
Conference on Stochastic Analysis and Finance, Warsaw, Poland
King's College, London, UK

2001
Joint AMS-FMS Meeting, Lyon, France
SIAM Conference on Control, San Diego, CA
INFORMS, Applied Probability Conference, New York, NY
Annual Meeting of the International Statistical Institute, Seoul, Korea
Conference on Financial Mathematics: Risk Management, Modeling and Numerical Methods, IPAM, UCLA, CA
Short course on Mathematical Finance (2 lectures), Thematic program on "Viscosity solutions methods in PDE", Pacific Institute for the Mathematical Sciences, Vancouver, Canada
Invited Hour-Lecture at AMS meeting at Ohio State University, OH
International Conference on Computational and Mathematical Finance, Seoul, Korea

2000
3rd World Congress of Nonlinear Analysis (WCNA-2000), University of Catania, Catania, Italy
Conference on Mathematical Analysis and its Applications, Athens, Greece
First Conference in Actuarial Science and Finance (plenary lecture), Samos, Greece
Conference on Mathematical Finance (plenary lecture), University of Missouri, Columbia
Conference on Stochastic Analysis in Finance and Insurance, Oberwolfach, Germany
5th World Congress of the Bernoulli Society, Guanajuato, Mexico
4th Columbia--JAFEE Conference on Mathematical Finance and Financial Engineering, Tokyo, Japan

1999
Workshop in Finance, National Technical University, Seoul, Korea
Risk Conference, New York, NY
University of Wisconsin-Madison, Madison, WI
AMS International Meeting, Denton, TX
ICCP99: International Conference on Complementarity Problems, Madison, WI
Economic Theory Conference, Rhodes, Greece
INFORMS, Applied Probability Conference, Ulm, Germany
Workshop on Risk Theory, Oberwolfach, Germany
Workshop on Mathematical Finance, Strobl and Vienna, Austria
Morning Star First School of Mathematical Finance, Beijing, China
University of Ulm, Ulm, Germany
Workshop on Mathematical Finance, Austin, TX
Conference on Decision and Control, Phoenix, AZ

1998
UCLA, Los Angeles, CA
Morgan Stanley, New York, NY
Conference on Computational Economics, Cambridge, England
Summer School on "Viscosity solutions and their applications", Herakleion, Greece
University of Texas at Austin, Austin, TX
Stanford University, Palo Alto, CA
Morgan Stanley, New York, NY

1997
AMS Annual Meeting (tutorial lecture), San Diego, CA
University of Chicago, Chicago, IL
Princeton University, Princeton, NJ
ETH, Zurich, Switzerland
AMS Regional Meeting, Detroit, MI
ESSEC, Paris, France
International Symposium on Mathematical Programming (plenary lecture), Lausanne, Switzerland
Conference on Quantitative Methods in Finance, QMF '97, Sydney, Australia
Conference on Risk Management, Finance and Insurance, Oberwolfach, Germany
AMS Meeting, Ixtapa, Mexico

1996
Workshop on Mathematical Finance and Applications, Humboldt University, Berlin, Germany
University of Vienna, Austria
International Meeting in Finance, AFFI, Geneva, Switzerland
University of Illinois, Urbana-Champaign, IL
SIAM Conference on Control and its Applications, Kansas, MO
University of Paris IX-Dauphine, Paris, France
ESSEC, Paris, France

1995
Bank of England Conference, Isaac Newton Institute, Cambridge, England
Conference on Numerical Methods in Mathematical Finance,
Isaac Newton Institute, Cambridge, England\

Conference on Mathematical Finance, Institute for Advanced Study, Princeton, NJ
University of Chicago, Chicago, IL
Midwest PDE meeting, Madison, WI
SIAM Conference on Decision and Control, St. Louis, MO
Workshop on Markets with Frictions, University of Chicago, Chicago, IL
Symposium on Options, University of Paris IX-Dauphine, Paris, France

1994
SIAM Conference on Control and its Applications, San Diego, CA
Meeting in Mathematical Economics and Mathematical Finance, Tunis, Tunis
Meeting on Computational Economics and Mathematical Finance, Amsterdam, Netherlands
ORSA/TIMS International Meeting, Anchorage, AL
Regional Meeting of IMS (special session), Cleveland, OH
Conference on Mathematical Finance, Institute of Advanced Study, Princeton, NJ
Washington University-St Louis, St. Louis, MO
AMS Meeting, Cincinnati, OH

1993
Meeting on Stochastic Processes and their Applications, Ascona, Switzerland
International Meeting in Finance, AFFI, La Baule, France
Workshop in Mathematical Finance, IMA, Minneapolis, MN
Workshop on Options, University of Illinois, Urbana-Champaign, IL
Cornell University, Ithaca, NY
University of Crete, Herakleion, Greece

1992
SIAM Conference on Control and its Applications, Minneapolis, MN
Meeting on Mathematical Finance, Oberwolfach, Germany
International Meeting in Finance, AFFI, Paris, France
National ORSA/TIMS meeting, Orlando, FL
NSF-INRIA Franco-American Workshop on Mathematical Finance, Paris, France
University of Chicago, Chicago, IL
Brown University, Providence, RI
University of Wisconsin, Madison, WI

1991
30th IEEE Conference on Decision and Control, Brighton, England
National Meeting on Systems Engineering, Santiago, Chile
TIMS/SOBRAPO International Meeting, Rio de Janeiro, Brazil
Conference on Hamilton-Jacobi Equations, Castelliogne, Italy
Journee de Micro-economie, Caen, France
ORSA/TIMS Special Interest Conference on Applied Probability, Monterey, CA

1990
29th IEEE Conference on Decision and Control, Honolulu, HI
Caisse Autonome de Refinancement (CAR), Paris, France
INRIA Conference on Mathematical Models in Finance, Rocquencout, France
Stanford University, Palo Alto, CA
University of Paris IX-Dauphine, Paris, France
MIT, Boston, MA

SERVICE TO THE PROFESSION

President (2006-2008) of the *Bachelier Finance Society*
Vice-President (2004-2006) of the *Bachelier Finance Society*

Vice Chair of the SIAM Activity Group in Financial Mathematics
and Engineering (1/1/2007-12/31/2008 and 1/1/2009-12/31/2010)

Member of SIAM Books Reviews, 2015-2020
Member of SIAM News Editorial Board, 2012-2014
Member of SIAM Best Paper Prize Committee, 2016
Member of SIAM Fellows Selection Committee, 2014, 2015, 2019 and 2020
Member of SIAM Junior Prize Committee, 2012

Member of Grand Prix Luis Bachelier Selection Committee,
for years 2014, 2016, 2017, 2018, 2020, 2022 and 2024
Member of Scientific Advisory Board, FMC2, 2009-2013
Member of EMMA Committee, College de France, 2011-2013
Chair of selection committee of the Bruti - Liberatti award, 2012
NSF Panelist
Member of Think Tank, Ernst & Young, "Financial Literacy"
and "Math Tutoring" Programs, 2016
Refereeing research proposals and scholarly articles

Mentoring

Financial Mathematics - Mentoring Initiative (*Chair* of Steering Committee)
Established in 2022

Editorial Positions

Academic Journals

Senior Editor of *Transactions of Mathematics and its Applications,* 2019 - present

Associate Editor of *SIAM Journal on Control and Optimization*, 2004-present
Associate Editor of *SIAM Journal on Financial Mathematics*, 2008-present
Associate Editor of *Mathematical Finance*, 1999-present
Associate Editor of *Decisions in Economics and Finance*, 2001-present
Associate Editor of *Finance and Stochastics*, 2003-present
Associate Editor of *Mathematics in Action*, 2008-present
Associate Editor of *Mathematics of Operations Research*, 2015- present
Associate Editor of the *Quarterly Journal in Finance*, 2010-present
Associate Editor of *Annals of Applied Probability*, 1997-2002

American Mathematical Society, Short Course Subcommittee, 2018-2020
American Mathematical Society, Short Course Subcommittee (Chair), 2020-2021

Monograph Series

Editor, SIAM Series in Financial Mathematics (2015- present)

Member of Editorial Board of SIAM Series in Financial Mathematics (2013-2014)
Member of Editorial Board of Applied Math Series of AIMS (2010- 2021)

Conference organization (selected)

Member of Scientific Committee, 12th World Congress of the Bachelier Finance Society, Rio de Janeiro, 2024

Member of Scientific Committee, 11th World Congress in Probability and Statistics, Bochun, 2024

Co-organizer (with R. Cont and J. Obloj), "Decision making and uncertainty", IMSI, University of Chicago, 2024

Co-organizer (with D. Berry, D. Bertsimas, J. Dong, A. Lo, M. van der Schaar and A. Orfanoudakis), "Mathematics, statistics and innovation in health and medical care", IMSI, University of Chicago, semester-long program, Spring 2023

Member of the Senior Program Committee of International Conference of Artificial Intelligence in Finance (ICAIF) 2022 and 2023

Co-organizer (with H. Hansen, T. Bielecki, M. Nutz, X. Guo and P. Klibanoff), "Decision making and uncertainty", IMSI, University of Chicago, semester-long program, 2022

Co-organizer (with H. Hansen, T. Bielecki, M. Nutz, X. Guo and P. Klibanoff), summer program on "Introduction to decision making and uncertainty", IMSI, University of Chicago, 2021

Co-organizer (with A. Lo), "Introduction to decision making in health and medical care", IMSI, University of Chicago, 2021

Co-organizer (with K. Weston), "Broad directions in Mathematical Finance", Rutgers, 2020

Co-organizer (with A. Capponi, C. Frei, A. Papapantoleon and R. Sircar), Workshop on "Modeling, Learning and Understanding: modern challenges between Financial Mathematics, Financial Technology and Financial Economics", BIRS, 2021 (postponed)

Co-organizer (with T. Beder and X. Guo), Meeting of Women in Financial Mathematics, IPAM, UCLA, 2017

Member of Scientific Committee of "Western Conference in Mathematica Finance", Washington, Seattle, 2017

Member of Scientific Committee of "SIAM Conference in Financial Mathematics", Austin, TX, 2016.

Member of Scientific Committee of "International workshop of BSDE, SPDE and their applications", Edinburgh, UK

Co-organizer (with R. Carmona and G. Papanicolaou) of the long program "Broad Perspectives and New Directions in Financial Mathematics", IPAM, UCLA, March – June, 2015

Co-organizer (with R. Carmona and A. Schied) of the workshop on "The Mathematics of high-frequency financial markets", IPAM, UCLA, 2015

Co-organizer (with T. Beder and X. Guo), Inaugural meeting of "Women in Financial Mathematics", IPAM, UCLA, 2015

Co-organizer (with M. Sirbu and G. Zitkovic) of the 5^{th} Western Consortium in Mathematcal Finance (WCMF), Austin, 2015
Organizer of mini symposium on “Forward asset allocation”, SIAM conference on Financial Mathematics and Engineering, Chicago, 2014
Member of the Scientific Committee of the 8th World Congress of the Bachelier Finance Society, Brussels, 2014
Co-organizer (with R. Sircar, U. Horst and M. Grasselli) of a meeting on “New Directions in Financial Mathematics and Mathematical Economics”, in Banff International Research Station (BIRS), Banff, July 2014
Co-organizer (with D. Crisan and B. Hambly) of the meeting on “Stochastics and applications”, University of Oxford, 2013
Co-organizer (with J.-P. Fouque, K. Giesecke and G. Papanicolaou) of the workshop on “Current Developments in Mathematical Finance”, IMA, University of Minneapolis, 2012
Member of the Scientific Committee of the “8^{th} World Congress in Probability and Statistics”, Istanbul, 2012
Co-organizer (with I. Karatzas and A. Schied) of the Workshop on “Advances in Portfolio Theory and Investment Management”, Oxford-Man Institute, 2011
Co-organizer (with R. Carmona) of the Workshop on “The New Commodity Market”, Oxford-Man Institute, 2011
Co-organizer (with X.Y. Zhou) of the First Annual Conference on “Contemporary Issues and New Directions”, Oxford-Man Institute, University of Oxford, 2011
Member of the Scientific Committee of the Conference on “Mathematical Finance and Partial Differential Equations”, Rutgers University, 2011
Member of the Scientific Committee of the “New Directions in Financial Mathematics” Conference, IPAM, UCLA, 2010
Member of the Organizing Committee of the “International Research Forum”, Hong Kong, 2010
Co-organizer (with G. Zitkovic and M. Sirbu) of the 2^{nd} Western Conference in Mathematical Finance, Austin, 2008
Member of Organizing Committee of the 2009 SIAM Annual Meeting, Denver, 2009
Member of Scientific Committee of the SIAM Conference in “Financial Mathematics and Engineering”, New York, 2008
Organizer of a special session on “Optimization and valuation in incomplete markets”, American Mathematical Society Meeting, New Orleans, 2007
Member of Scientific Committee of the SIAM Conference in Financial Mathematics and Engineering, Boston, 2006
Member of Scientific Committee of the SAMSI (Statistical and Applied Mathematics Institute) Program on Financial Mathematics, Fall 2005
Member of Organizing Committee of Workshop “Semi-martingale Theory and Practice in Finance”, BIRS, Banff, 2004
Organizer and Chair of Scientific Committee of the “2nd Congress of the Bachelier Finance Society”, Crete, 2002

POSTDOCTORAL FELLOWS

G. Brunick (UT-Austin; Ph.D., Carnegie Mellon University)
W. Gu (UT-Austin; Ph.D., UC, Berkeley)
G. Liang (Oxford; Ph.D., University of Oxford, currently at Warwick)
J. Lim (UT-Austin; Ph.D., Courant Institute, NYU)
S. Nadtochiy (Oxford; Ph.D., Princeton, currently at IIT)
J. Ruf (Oxford; Ph.D., Columbia University, currently at LSE)
G. Shim (UT-Austin; Ph.D., Seoul National University)
M. Tehranchi (UT-Austin; Ph.D., Princeton, currently at Cambridge U)

GRADUATE STUDENTS

Harrison Waldon (2023)- first placement: University of Oxford, postdoctoral fellow
Luhao Zhang (2023) – first placement: Columbia University, postdoctoral fellow and Tenure-track Assistant Professor, Johns Hopkins University.

H. Wang (2018), X. Han (2017), T. Giang (2017), P. Vitoria (2015), B. Angoshtari (2014), S. Kallblad (2014), P. Monin (2013), N. Ringer (2011), T. Zhou (2008), K. Sokolova (2007), Q. Su (2007), S. Stoikov (2005), M. Mazaheri (2002), C. Tiu (2002), S. MacNair (2000)

DOCTORAL DISSERTATION COMMITTEES

Tristan Pace (Mathematics, in candidacy)

J. Jackson (2023) – first placement, University of Chicago – postdoctoral fellow

Agatha Soret (Columbia University, 2022), Yuxin Zhang (2020), R. Li (2017), R. Fayvisovich (2016), J. Bello-Rivas (2016), P. Goswami (2016), A. Kontaxis (2015), J. Li (2015), A. Ellanskaya (2014), Y. Choi (2012), Y. Wu (2012), X. Yu (2012), Y. Zhao (2012), D. Schwartz (2012), G. Liang (2010), B. Yang (2010), A. Ditanna (2009), M. Anthropelos (2008), R. Elie (2007), S. Kolos (2005), W. Hann (2005), B. Choi (2002), R. Melbourn (2000), C. Mueller (2000), T. Simmons (2000), B. Franklin (1999), Y. Oguz (1997), M. Giand-Abizatti (1996), M. Cho (1994), A. Tourin (1992)