



College of Liberal Arts and Sciences
Department of Mathematics
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Professional Record: Jose Luis Menaldi, Sc.D.
<https://clasprofiles.wayne.edu/profile/ad4444>

Research Interest:

Applied Mathematics, Stochastic Control Systems Theory, Calculus of Variations and Optimal Control, Optimization, Partial Differential Equations, Probability Theory and Stochastic Processes.

Academic Degrees:

M.S. (Licenciado en Matematica), University of Rosario, Argentina, 1973.

Sc.D. (Docteur d'Etat Es-Sciences), University of Paris-Dauphine, France, 1980.

ACADEMIC POSITIONS

Main Positions

- **1972-1974:** *Teacher Assistant (Auxiliar)*, Department of Mathematics, College of Sciences and Engineering, University of Rosario, Argentina.
- **1974-1975:** *Instructor (Jefe de Trabajos Practicos)*, Department of Mathematics, College of Sciences and Engineering, University of Rosario, Argentina.
- **1975-1976:** *Research Fellow (Bourse de Perfectionement)*, French Government (Centre International des Etudiants et Stagiaires), Institute for Research in Computer Science and Automation (Institut de Recherche d'Informatique et d'Automatique), France.
- **1976-1977:** *Instructor (Assistant Associe)*, Department of Mathematics, University of Paris-Dauphine, France.
- **1977-1978:** *Research Assistant Professor (Chercheur)*, Institute for Research in Computer Science and Automation, France.
- **1978-1979:** *Assistant Professor (Maitre-Assistant Associe)*, Department of Mathematics, University of Paris-Dauphine, France.
- **1979-1980:** *Visiting Assistant Professor*, Department of Mathematics, University of Kentucky, USA.
- **1980-1981:** *Assistant Professor (Maitre-Assistant Associe)*, Department of Mathematics, University of Paris-Dauphine, France.
- **1981-1983:** *Assistant Professor*, Department of Mathematics, Wayne State University, USA.
- **1983-1988:** *Associate Professor (with Tenure)*, Department of Mathematics, Wayne State University, USA.
- **1988-2023:** *Full Professor (with Tenure)*, Department of Mathematics, Wayne State University, USA.
- **2023-present:** *Emeritus Professor*, Department of Mathematics, Wayne State University, USA.

Visiting Positions

Since 1978, at the level of (Research) Assistant, Associate and Full Professor in:

- [Universite de Paris-Dauphine](#), France.
- [Istituto per le Applicazioni del Calcolo](#), Italy.
- [Brown University](#), USA.
- [Universite de Paris-Orsay](#), France.
- [Universite de Orleans](#), France,
- [Universidad de Buenos Aires \(UBA\)](#), Argentina.
- [Institut National de Recherche en Informatique et en Automatique \(INRIA\)](#), France.
- [Universita degli studi di Rome "La Sapienza"](#), Italy.

Details

Visiting Professor, IAC (Institute of Applied Mathematics), Italy (*March 1981*).

Visiting Assistant Professor, Division of Applied Mathematics, Brown University, USA (*Summer 1981*).

Visiting Associate Professor, Department of Mathematics, University of Paris-Dauphine, France (*Fall 1983*).

Visiting Associate Professor, Department of Mathematics, University of Paris-Orsay, France (*Half Winter 1984*).

Visiting Associate Professor, National Institute for Research in Computer Science and Automation (INRIA, Institut National de Recherche en Informatique et en Automatique), France (*Half Winter 1984*).

Visiting Associate Professor, Division of Applied Mathematics, Brown University, USA (*August 1987, July 1988*).

Visiting Professor, Department of Mathematics, University of Roma, Italy (*February-March 1987, May 1989, April 1991, June 1992, May 1995, May 1996, September 1997, June 1999*).

Visiting Professor, INRIA (National Institute for Research in Computer Science and Automation), France (*April-May 1987, June-July 1989, May 1991, June 1995, June 1996, June 1996, May 1999*).

Adjunct Research Fellow, National Council of Scientific Research and Technology (CONICET, Consejo Nacional de Investigaciones Científica y Técnicas), Argentina (*1988-1996*).

Visiting Professor, University of Buenos Aires and Argentine Institute of Mathematics, Argentina (*Fall 1990, April 1994*).

Visiting Professor, Department of Mathematics, University of Orleans, France (*May 1992*).

Other short term visiting positions in more recent years.

Unlisted.

RESEARCH PUBLICATIONS

Books

- **Green Functions for Parabolic Second Order Integro-Differential Equations** (with M.G. Garroni). *Pitman Research Notes in Mathematics Series*, No. 275, Longman, London, 1992, 423 pp. (ISBN 0-582-02156-1).
- (Editors) **Optimal Control and Partial Differential Equations. A Volume in Honor of Professor Alain Bensoussan's 60th Birthday** (with E. Rofman and A Sulem). *IOS Press*, Amsterdam, 2001, 569 pp. (ISBN 1-586-03096-5).
- **Second Order Elliptic Integro-Differential Problems** (with M.G. Garroni). *Research Notes in Mathematics*, No. 430, Chapman & Hall/CRC, Boca Raton, 2002, 221 pp. (ISBN 1-584-88200-X).
- **Stochastic Differential Equations with Jumps**. *Internet Publication*, 2008, 749pp, (Version 15/May/2008, current 07/01/2014, provided 2023-10-12). See [DigitalCommons@WSU](#) and [FRPs List](#).
- **Measure and Integration: Theory and Exercises**. *Internet Publication*, 2015, 410pp, (Version 12/Dec/2015, current 11/11/2016). See [DigitalCommons@WSU](#) and [FRPs List](#).
- **Distributions and Function Spaces: Schwartz Theory of Distributions, Sobolev and Besov Spaces**. *Internet Publication*, 2016, 423pp, (Version 11/Nov/2016, current 01/Apr/2019). See [DigitalCommons@WSU](#) and [FRPs List](#).
- **Stochastic Processes and Stochastic Integrals**. *Internet Publication*, 2017, 456pp, (Version 12/Dec/2017, current 24/04/2018) | [pdf](#) | [content](#) | [current pdf 2018](#). See [DigitalCommons@WSU](#) and [FRPs List](#).
- **Basic Probability Theory (preliminary version)**. *Internet Publication*, 2021, 285pp, (Version 21/Mar/2021, provided 2022-09-17). See [DigitalCommons@WSU](#) and [FRPs List](#).
- **SDEs, Jumps and Estimates (preliminary version)**. *Internet Publication*, 2018, 431pp, (Version 24/Nov/2018, provided 2022-09-17). See [DigitalCommons@WSU](#) and [FRPs List](#).

Other Research Publications (since 1974) [>see pages 5-19]

- Articles in Journals or Book Chapters
- Papers in Conference Proceedings
- Research Announcements
- Abstract in Meetings (w/o proceedings)
- Others

About 100 papers, see link [MathSciNet Items Authored](#) (by [Jose Luis Menaldi](#))

TEACHING ASSIGNMENTS

Years 1972-75:

Several Undergraduate Courses in Mathematics, [Facultad de Ciencias Exactas Ingeniería y Agrimensura, University of Rosario](#), Argentina.

Years 1975-79, 1980-81:

Several Undergraduate Courses in Mathematics, [Centre de Recherche en Mathématiques de la Décision, University of Paris-Dauphine](#), France.

Years 1979-80:

Undergraduate Courses, [Department of Mathematics, University of Kentucky](#), USA.

Years 1980-2023 (WSU):

Several Undergraduate and Graduate Courses, [Department of Mathematics, Wayne State University](#), USA.

Current 2023-:

Retired, [Department of Mathematics, Wayne State University](#), USA.

Details on Teaching Assignments:

... Since 1981 at WSU, but details on only last 20 years or so ...

1997 – Winter: MAT-5100 (Numerical Methods), MAT-7210 (Partial Differential Equations); **Fall:** Sabbatical Leave.

1998 – Winter: MAT-2030 (Calculus III, two sections); **Fall:** MAT-2010 (Calculus I), MAT-5600 (Introduction to Analysis I).

1999 – Winter: MAT-2030 (Calculus III), MAT-5610 (Introduction to Analysis II); **Fall:** MAT-2010 (Calculus I), MAT-2030 (Calculus III).

2000 – Winter: MAT-2020 (Calculus II), MAT-5070 (Advanced Calculus I); **Fall:** MAT-2020 (Calculus II), MAT-7200 (Ordinary Differential Equations).

2001 – Winter: MAT-2010 (Calculus I), MAT-2020 (Calculus II); **Fall:** Sabbatical Leave.

2002 – Winter: MAT-2010 (Calculus I), MAT-2020 (Calculus II); **Fall:** MAT-2010 (Calculus I), MAT-2150 (Differential Equations and Matrix Algebra).

2003 – Winter: MAT-2030 (Calculus III), MAT-2250 (Elementary Linear Algebra); **Fall:** MAT-5600 (Introduction to Analysis I), MAT-2150 (Differential Equations and Matrix Algebra).

2004 – Winter: MAT-2030 (Calculus III), MAT-5610 (Introduction to Analysis II); **Fall:** MAT-2020 (Calculus II), MAT-2150 (Differential Equations and Matrix Algebra).

2005 – Winter: Sabbatical Leave; **Fall:** MAT-2250 (Elementary Linear Algebra), MAT-5700 (Introduction to Probability Theory).

2006 – Winter: Leave of Absence; **Fall:** MAT-2150 (Differential Equations and Matrix Algebra), MAT-6480 (Linear Statistical Models).

2007 – Winter: MAT-2020 (Calculus II), MAT-2030 (Calculus III); **Fall:** MAT-2020 (Calculus II), MAT-7600 (Real Analysis I).

2008 – Winter: MAT-1800 (Elementary Functions), MAT-2030 (Calculus III); **Fall:** MAT-2030 (Calculus III), MAT-6480 (Linear Statistical Models).

2009 – Winter: STA-1020 (Statistics), MAT-2030 (Calculus III); **Fall:** STA-1020 (Statistics), MAT-2020 (Calculus II).

2010 – Winter: STA-1020 (Statistics, two sections); **Fall:** STA-1020 (Statistics, two sections).

2011 – Winter: STA-1020 (Statistics), MAT-2030 (Calculus III); **Fall:** STA-1020 (Statistics), MAT-2150 (Differential Equations and Matrix Algebra).

2012 – Winter: STA-1020 (Statistics), MAT-2010 (Calculus I); **Fall:** MAT-2030 (Calculus III), MAT-5770 (Mathematical Models and Operation Research).

2013 – Winter: MAT-2020 (Calculus II), MAT-2030 (Calculus III); **Fall:** STA-1020 (Statistics), MAT-7200 (Ordinary Differential Equations).

2014 – Winter: MAT-2030 (Calculus III), MAT-2250 (Elementary Linear Algebra); **Fall:** Sabbatical Leave.

2015 – Winter: MAT-2020 (Calculus II), MAT-2030 (Calculus III); **Fall:** MAT-2020 (Calculus II), MAT-2030 (Calculus III).

2016 – Winter: MAT-2020 (Calculus II), MAT-2030 (Calculus III); **Fall:** MAT-2020 (Calculus II), MAT-2250 (Elementary Linear Algebra).

2017 – Winter: MAT-2020 (Calculus II), MAT-6480 (Linear Statistical Models); **Fall:** MAT-2020 (Calculus II, two sections).

2018 – Winter: MAT-2030 (Calculus III, two sections); **Fall:** MAT-2020 (Calculus II, two sections).

2019 – Winter: Sabbatical Leave; **Fall:** MAT-2030 (Calculus III), MAT-2150 (Differential Equations and Matrix Algebra).

2020 – Winter: MAT-2150 (Differential Equations and Matrix Algebra, two sections); **Fall:** MAT-2030 (Calculus III, two sections).

2021 – Winter: Phase retirement; **Fall:** MAT-2030 (Calculus III, two sections).

2022 – Winter: Phase retirement; **Fall:** MAT-2030 (Calculus III, two sections).

>DETAIL: Other Research Publications (since 1974)

>PAPERS PUBLISHED IN BOOK CHAPTERS

- **Optimal Stochastic Control of Diffusion Processes with Jumps Stopped at the Exit of a Domain** (with A. Bensoussan). *Stochastics Analysis and Applications*, Vol. 7 of *Advances in Probability*, Ed.: Mark A. Pinsky, Marcel Dekker Inc., New York, 1984, Chapter 2, pp. 98-122.
 - **Bounded Variation Control of a Damped Linear Oscillator Under Random Disturbances.** *Stochastic Differential Systems, Stochastic Control and Applications (IMA Volume 10)*, Eds.: W. Fleming and P.L. Lions, Springer-Verlag, New York, 1988, pp. 373-394.
 - **Maximum Principles in Unbounded Domains for Integro-Differential Parabolic Operators** (with M.G. Garroni). *Boundary Value Problems for Partial Differential Equations and Applications (A Volume in Honor of E. Magenes)*, Eds.: C. Baiocchi and J.L. Lions, Masson, Paris, 1993, pp. 359-365.
 - **On Optimal Ergodic Control of Diffusions with Jumps** (with M. Robin). *Stochastic Analysis, Control, Optimization and Applications (A Volume in Honor of W.H. Fleming)*, Eds.: W.M. McEneaney, G. Yin, and Q. Zhang, Birkhauser, Boston, 1999, Chapter 26, pp. 439-456. (<http://digitalcommons.wayne.edu/mathfrp/53>)
 - **On Some Reachability Problems for Diffusion Processes** (with M. Robin). *Optimal Control and Partial Differential Equations (A Volume in Honor of A. Bensoussan)*, Eds.: J.L. Menaldi, E. Rofman and A. Sulem, IOS Press, Amsterdam, 2001, pp. 394-403. (<https://digitalcommons.wayne.edu/mathfrp/59/>)
 - **Laboratorio de la Voz** (with M.C. Jackson-Menaldi). *La Voz Patologica*, (Ed.: M.C. Jackson-Menaldi), Editorial Medica Panamericana, Buenos Aires, 2002, Chapter 13, pp. 229-244.
 - **Stochastic Analysis of Tidal Dynamic Equation** (with U. Manna and S.S. Sritharan). *Infinite Dimensional Stochastic Analysis (In Honor of Hui-Hsiung Kuo)*, Eds.: A.N. Sengupta and P. Sundar, World Scientific, Singapore, 2008, pp. 90-113. (https://doi.org/10.1142/9789812779557_0006)
 - **On Optimal Stopping and Impulse Control with Constraint** (with M. Robin). *Modeling, Stochastic Control, Optimization, and Applications (The IMA Volumes in Mathematics and its Application 164)*, Eds.: Q. Zhang and G. Yin, Springer, Switzerland, 2019, pp. 427-450. (https://doi.org/10.1007/978-3-030-25498-8_18)
 - **Ergodic Impulse Control with Constraint, the Locally Compact Case** (with M. Robin). *Stochastic Modeling and Control (Banach Center Publications 122)*, Eds.: J. Jakubowski, M. Nieweglowski, M. Rasonyi and L. Stettner, Institute of Mathematics, Polish Academy of Sciences, Warszawa, 2020, pp. 187-206. (<https://doi.org/10.4064/bc122-11>)
 - **Optimal Stopping Problems for a Family of Continuous-Time Markov Processes** (with H. Jasso-Fuentes and F. Vásquez-Rojas). *Modern Trends in Controlled Stochastic Processes: Theory and Applications, V.III*, Eds.: Alexey Piunovskiy and Yi Zhang, Springer, Switzerland, 2021, pp. 56-86. (https://doi.org/10.1007/978-3-030-76928-4_4)
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>PAPERS PUBLISHED IN JOURNALS

- **Sobre un Problema de Tiempo Final Optimo** (with E. Rofman). *Mathematicae Notae*, Vol. 24, 1974/75, pp. 65-87.
- **Il Metodo di Collocazione nei Problemi di Controllo Ottimo** (with E. Rofman). *Bollettino dell'Unione Matematica Italiana*, Serie 2, Vol. 13-B, 1976, pp. 574-587.

- **Methodes Constructives en Controle Optimal** (with E. Rofman). *Mathematicae Notae*, Vol. 26, 1977/78, pp. 81-98.
- **Le Principe de Separation pour le Probleme de Temps d'Arret Optimal.** *Stochastics*, Vol. 3, No. 1, 1979, pp. 47-59.
- **On the Optimal Stopping Time Problem for Degenerate Diffusions.** *SIAM Journal on Control and Optimization*, Vol. 18, No. 6, 1980, pp. 697-721. (<http://digitalcommons.wayne.edu/mathfrp/24>)
- **On the Optimal Impulse Control Problem for Degenerate Diffusions.** *SIAM Journal on Control and Optimization*, Vol. 18, No. 6, 1980, pp. 722-739. (<http://digitalcommons.wayne.edu/mathfrp/25>)
- **A Singular Perturbations Result for Variational and Quasi-Variational Inequalities.** *Nonlinear Analysis, Theory, Methods and Applications*, Vol. 5, No. 4, 1981, pp. 381-400.
- **The Separation Principle for Impulse Control Problems.** *Proceedings of the American Mathematical Society*, Vol. 82, No. 3, 1981, pp. 439-445.
- **Gradient Bounds for Solutions of Degenerate Variational Inequalities** (with L.C. Evans). *Applied Mathematics and Optimization*, Vol. 7, No. 3, 1981, pp. 247-252 and Correction Vol. 8, No. 2, 1982, p. 197.
- **Existence and Uniqueness for Degenerate Second Order Variational Inequalities.** *Nonlinear Analysis, Theory, Methods and Applications*, Vol. 5, No. 6, 1981, pp. 685-703.
- **On the Degenerate Quasi-Variational Inequality with Neumann Boundary Conditions.** *Mathematicae Notae*, Vol. 29, 1981/82, pp. 47-66.
- **Le Probleme de Temps d'Arret Optimal Deterministe et l'Inequation Variationelle du Premier Ordre Associee.** *Applied Mathematics and Optimization*, Vol. 8, No. 2, 1982, pp. 131-158.
- **Le Probleme de Controle Impulsionnel Optimal Deterministe et l'Inequation Quasi-Variationnelle du Premier Ordre Associee.** *Applied Mathematics and Optimization*, Vol. 8, No. 3, 1982, pp. 223-243.
- **Optimal Control of Stochastic Integrals and Hamilton-Jacobi-Bellman Equations Parts I and II** (with P.L. Lions). *SIAM Journal on Control and Optimization*, Vol. 20, No. 1, 1982, pp. 58-81 and pp. 82-95. Part I: (<http://digitalcommons.wayne.edu/mathfrp/26>), Part II: (<http://digitalcommons.wayne.edu/mathfrp/27>)
- **On a Degenerate Variational Inequality with Neumann Boundary Conditions.** *Journal of Optimization Theory and Applications*, Vol. 36, No. 4, 1982, pp. 535-563.
- **Stochastic Variational Inequality for Reflected Diffusions.** *Indiana University Mathematics Journal*, Vol. 32, No. 5, 1983, pp. 733-744.
- **On Some Cheap Control Problems for Diffusion Processes** (with M. Robin). *Transactions of the American Mathematical Society*, Vol. 278, No. 2, 1983, pp. 771-802.
- **On a System of First Order Quasi-Variational Inequalities Connected with Optimal Switching Problem** (with I.C. Dolcetta, M. Matzeu). *Systems and Control Letters*, Vol. 3, No. 2, 1983, pp. 113-116.
- **Method of Regularization for Stochastic Evolution Equations** (with P.L. Chow). *Stochastic Analysis and Applications*, Vol. 1, No. 4, 1983, pp. 353-376.
- **Optimal Stochastic Scheduling of Power Generation Systems with Scheduling Delays and Large Cost Differentials** (with G.L. Blankenship). *SIAM Journal on Control and Optimization*, Vol. 22, No. 1, 1984, pp. 121-132. (<http://digitalcommons.wayne.edu/mathfrp/28>)
- **On a Singular Control Problems for Diffusions with Jumps** (with M. Robin). *IEEE Transactions on Automatic Control*, Vol. AC-29, No. 11, 1984, pp. 991-1004.
- **An Ergodic Control Problem for Reflected Diffusions with Jumps** (with M. Robin). *IMA Journal of Mathematical Control and Information*, Vol. 1, No. 3, 1984, pp. 309-322.
- **Reflected Diffusion Processes with Jumps** (with M. Robin). *The Annals of Probability*, Vol. 13, No. 2, 1985, pp. 319-341. (<http://digitalcommons.wayne.edu/mathfrp/33>)

- **On Optimal Correction Problems with Partial Information** (with M. Robin). *Stochastic Analysis and Applications*, Vol. 3, No. 1, 1985, pp. 63-92.
- **Additive Control of Stochastic Linear Systems with Finite Horizon** (with P.L. Chow, M. Robin). *SIAM Journal on Control and Optimization*, Vol. 23, No. 6, 1985, pp. 858-899. (<http://digitalcommons.wayne.edu/mathfrp/29>)
- **Optimal Impulse Control Problems for Degenerate Diffusions with Jumps**. *Acta Applicandae Mathematicae*, Vol. 8, No. 2, 1987, pp. 165-198.
- **On the Asymptotic Behaviour of Solutions of Integro-Differential Inequalities** (with M.G. Garroni). *Ricerche di Matematica*, Vol. 36, 1987, Supplemento in Ricordo di Carlo Miranda, pp. 149-171.
- **Probabilistic View of Estimates for Finite Difference Methods**. *Mathematicae Notae*, Vol. 32, 1987/88, pp. 1-37.
- **Monotone Control of a Damped Oscillator under Random Perturbations** (with M. Sun). *IMA Journal of Mathematical Control and Information*, Vol. 5, No. 2, 1988, pp. 169-186.
- **On the Numerical Approximations of an Optimal Correction Problem** (with M.C. Bancora-Imbert, P.L. Chow). *SIAM Journal on Scientific and Statistical Computing*, Vol. 9, No. 6, 1988, pp. 970-991. (<http://digitalcommons.wayne.edu/mathfrp/30>)
- **Asymptotic Behavior of the First Order Obstacle Problem** (with I. Capuzzo Dolcetta). *Journal of Differential Equations*, Vol. 75, No. 2, 1988, pp. 303-328.
- **On the Control of Queueing System with Failures and Repairs** (with M. Robin). *Applied Stochastic Models and Data Analysis*, Vol. 4, No. 3, 1988, pp. 205-213.
- **Green Function and Invariant Density for an Integro-Differential of Second Order** (with M.G. Garroni). *Annali di Matematica Pura ed Applicata*, Serie 4, Vol. 154, 1989, pp. 147-222.
- **On the Asymptotic Behaviour of Stopping Time Problems** (with M. Robin). *Bollettino dell'Unione Matematica Italiana*, Serie 7, Vol. 3-B, No. 3, 1989, pp. 723-734. (<http://digitalcommons.wayne.edu/mathfrp/49>)
- **Optimal Correction Problems of Multidimensional Stochastic Systems** (with M.I. Taksar). *Automatica*, Vol. 25, No. 3, 1989, pp. 223-232.
- **Some Estimates for Finite Difference Approximations**. *SIAM Journal on Control and Optimization*, Vol. 27, No. 3, 1989, pp. 579-607. (<http://digitalcommons.wayne.edu/mathfrp/34>)
- **On the Optimal Reward Function of the Continuous Multi-Armed Bandit Problem** (with M. Robin). *SIAM Journal on Control and Optimization*, Vol. 28, No. 1, 1990, pp. 97-112. (<http://digitalcommons.wayne.edu/mathfrp/35>)
- **Exponential Estimates in Exit Probability for Diffusion Process in Hilbert Spaces** (with P.L. Chow). *Stochastics and Stochastics Reports*, Vol. 28, No. 3, 1990, pp. 377-393.
- **Variational Approach of Serial Multi-Level Production/Inventory System** (with F. Kabbaj, E. Rofman). *Journal of Optimization Theory and Applications*, Vol. 65, No. 3, 1990, pp. 447-483.
- **Ergodic Problem for Optimal Stochastic Switching** (with B. Perthame, M. Robin). *Journal of Mathematical Analysis and Applications*, Vol. 147, No. 2, 1990, pp. 512-530.
- **Remarks on Estimates for the Green Function**. *Revista de la Union Matematica Argentina*, Vol. 35, 1990, pp. 207-243. (<http://digitalcommons.wayne.edu/mathfrp/58>)
- **Viscosity Solutions of the Bellman and Isaacs Equations on Attainable Sets** (with H. Ishii, L.S. Zaremba). *Problems in Control and Information Theory*, Vol. 20, No. 5, 1991, pp. 317-329.
- **Singular Ergodic Control for Multidimensional Gaussian Processes** (with M. Robin, M.I. Taksar). *Mathematics of Control, Signals and Systems*, Vol. 5, No. 1, 1992, pp. 93-144. (<http://digitalcommons.wayne.edu/mathfrp/50>)

- **Optimal Control and Differential Games with Measures** (with E.N. Barron and R. Jensen). *Nonlinear Analysis, Theory, Methods and Applications*, Vol. 21, No. 4, 1993, pp. 241-268.
(<http://digitalcommons.wayne.edu/mathfrp/37>)
- **Generalized Lamé-Clapeyron Solution for a One-Phase Source Stefan Problem** (with D.A. Tarzia). *Computational and Applied Mathematics*, Vol. 12, No. 2, 1993, pp. 21-40.
(<http://digitalcommons.wayne.edu/mathfrp/51>)
- **Regularizing Effect for Integro-Differential Parabolic Equations** (with M.G. Garroni). *Communications in Partial Differential Equations*, Vol. 18, No. 12, 1993, pp. 2023-2050.
(<http://digitalcommons.wayne.edu/mathfrp/44>)
- **Regularity of The Free-Boundary in Singular Stochastic Control** (with P.L. Chow, S.A. Williams). *Journal of Differential Equations*, Vol. 109, No. 1, 1994, pp. 175-201.
(<http://digitalcommons.wayne.edu/mathfrp/38>)
- **Maximum Principle for Integro-Differential Parabolic Operators** (with M.G. Garroni). *Differential and Integral Equations*, Vol. 8, No. 1, 1995, pp. 161-182.
- **On a Investment-Consumption Model with Transaction Costs** (with M. Akian, A. Sulem). *SIAM Journal on Control and Optimization*, Vol. 34, No. 1, 1996, pp. 329-364.
(<http://digitalcommons.wayne.edu/mathfrp/36>)
- **Optimal Starting-Stopping Problems for General Markov Processes** (with M. Robin and M. Sun). *Stochastics and Stochastic Reports*, Vol. 56, No. 1, 1996, pp. 17-32.
(<http://digitalcommons.wayne.edu/mathfrp/45>)
- **Ergodic Control of Reflected Diffusions with Jumps** (with M. Robin). *Applied Mathematics and Optimization*, Vol. 35, No. 2, 1997, pp. 117-137. (<http://digitalcommons.wayne.edu/mathfrp/52>)
- **Infinite-Dimensional Hamilton-Jacobi-Bellman Equations in Gauss-Sobolev Spaces** (with P.L. Chow). *Nonlinear Analysis, Theory, Methods and Applications*, Vol. 29, No. 4, 1997, pp. 415-426.
(<http://digitalcommons.wayne.edu/mathfrp/39>)
- **Hybrid Control and Dynamic Programming** (with A. Bensoussan). *Dynamics of Continuous Discrete and Impulsive Systems*, Vol.3, No 4, 1997, pp. 395-442.
- **Stochastic PDE for Nonlinear Vibration of Elastic Panels** (with P.L. Chow). *Differential and Integral Equations*, Vol. 12, No. 3, 1999, pp. 419-434.
- **Invariant Measures for Diffusions with Jumps** (with M. Robin). *Applied Mathematics and Optimization*, Vol. 40, No. 1, 1999, pp. 105-140. (<http://digitalcommons.wayne.edu/mathfrp/53>)
- **Stochastic Hybrid Control** (with A. Bensoussan), *Journal of Mathematical Analysis and Applications* (Special issue in honor of Richard Bellman), Vol. 249, No. 1, 2000, pp. 261-288.
(<http://digitalcommons.wayne.edu/mathfrp/40>)
- **Stochastic Hybrid Optimal Control Models**. *Aportaciones Matematicas*, Vol. 16, 2001, pp. 205-250,
- **Stochastic 2-D Navier-Stokes Equation** (with S.S. Sritharan). *Applied Mathematics and Optimization*, Vol. 46, No. 1, 2002, pp. 31-53 (<http://digitalcommons.wayne.edu/mathfrp/54>)
- **Impulse Control of Stochastic Navier-Stokes Equation** (with S.S. Sritharan). *Nonlinear Analysis, Theory, Methods and Applications, Series A*, Vol. 52, No. 2, 2003, pp. 357-381,
(<http://digitalcommons.wayne.edu/mathfrp/41>)
- **Difference Equations on Weighted Graphs** (with A. Bensoussan). *Journal of Convex Analysis* (Special issue in honor of Claude LeMarechal), Vol. 12, No. 1, 2005, pp. 13-44.
- **Penalty Approximation and Analytical Characterization of the Problem of Super-Replication under Portfolio Constraints** (with A. Bensoussan and N. Touzi). *Asymptotic Analysis* , Vol. 41, No. 3-4, 2005, pp. 311-330. (<http://digitalcommons.wayne.edu/mathfrp/42>)
- **Remarks on Risk-Sensitive Control on Infinite Time Horizon** (with M. Robin). *Applied Mathematics and Optimization*, Vol. 52, No. 3, 2005, pp. 297-310. (<http://digitalcommons.wayne.edu/mathfrp/55>)

- **Local Solutions to the Hamilton-Jacobi-Bellman Equation in Stochastic Problems of Optimal Control** (with A.S. Bratus and D.V. Iourtchenko). *Doklady Mathematics*, Vol. 74, No. 1, 2006, pp. 610-613.
- **A Distributed Parabolic Control with Mixed Boundary Conditions** (with D.A. Tarzia). *Asymptotic Analysis*, Vol. 52, No. 3-4, 2007, pp. 227-241. (<http://digitalcommons.wayne.edu/mathfrp/43>)
- **Green and Poisson Functions with Wentzell Boundary Condition** (with L. Tubaro). *Journal of Differential Equations*, Vol. 237, No. 1, 2007, pp. 77-115. (<https://doi.org/10.1016/j.jde.2007.02.003>)
- **Some Results of Backward Ito Formula** (with G. Da Prato and L. Tubaro). *Stochastic Analysis and Applications*, Vol. 25, No. 3, 2007, pp. 679-703. (<https://doi.org/10.1080/07362990701283045>)
- **Local Solutions to the Hamilton-Jacobi-Bellman Equation for Some Stochastic Problems** (with A.S. Bratus, A. P. Ivanova and D.V. Iourtchenko). *Automation and Remote Control*, Vol. 68, No. 6, 2007, pp. 1023-1038. (<https://doi.org/10.1134/S0005117907060094>)
- **Stochastic 2-D Navier-Stokes Equation with Artificial Compressibility** (with U. Manna, S.S. Sritharan). *Communications on Stochastic Analysis*, Vol. 1, No. 1, 2007, pp. 123-139. (<https://doi.org/10.31390/cosa.1.1.10>)
- **On the LQG Theory with Bounded Control** (with A.S. Bratus and D.V. Iourtchenko). *Nonlinear Differential Equations Applications*, Vol. 17, No. 5, 2010, pp. 527-534. (<https://doi.org/10.1007/s00030-010-0066-1>)
- **On the Impulse Control of Jump Diffusions** (with E. Bayraktar and T. Emmerling). *SIAM Journal on Control and Optimization*, Vol. 51, No. 3, 2013, pp. 2612-2637. (<https://doi.org/10.1137/120863836>)
- **Singular Ergodic Control for Multidimensional Gaussian-Poisson Processes** (with M. Robin). *Stochastics* (Volume in Memory of M. Taksar, Ed.: A. Bensoussan), Vol. 85, No. 4, 2013, pp. 682-691. (<https://doi.org/10.1080/17442508.2013.795569>)
- **Almost Sure Asymptotic Stabilization of Differential Equations with Time-varying Delay by Levy Noise** (with D. Liu and W. Wang). *Nonlinear Dynamics*, Vol. 79, No. 1, 2015, pp. 163-172. (<https://doi.org/10.1007/s11071-014-1653-1>)
- **On Some Optimal Stopping Problems with Constraint** (with M. Robin). *SIAM Journal on Control and Optimization*, Vol. 54, No. 5, 2016, pp. 2650-2671. (<https://doi.org/10.1137/15M1040001>)
- **On Some Impulse Control Problems with Constraint** (with M. Robin). *SIAM Journal on Control and Optimization*, Vol. 55, No. 5, 2017, pp. 3204-3225. (<https://doi.org/10.1137/16M1090302>)
- **On Some Ergodic Impulse Control Problems with Constraint** (with M. Robin). *SIAM Journal on Control and Optimization*, Vol. 56, No. 4, 2018, pp. 2690-2711. (<https://doi.org/10.1137/17M1147573>)
- **Discrete-time Hybrid Control in Borel spaces** (with H. Jasso-Fuentes and T. Prieto-Rumeau). *Applied Mathematics and Optimization*, Published online: 2018, pp. 1-33. (<https://doi.org/10.1007/s00245-018-9503-z>) Vol. 81, No. 2, 2020, pp. 409-441.
- **Discrete-time Hybrid Control in Borel Spaces: Average Cost Optimality Criterion** (with H. Jasso-Fuentes, T. Prieto-Rumeau and M. Robin). *Journal of Mathematical Analysis and Applications*, Vol. 462, No. 2, 2018, pp. 1695-1713. (<https://doi.org/10.1016/j.jmaa.2018.03.007>)
- **Relaxation and Linear Programs in Hybrid Control Problems** (with H. Jasso-Fuentes). *Applications Mathematicae*, Vol. 46, No. 2, 2019, pp. 191-227. (<https://doi.org/10.4064/am2387-6-2019>)
- **Hybrid Models and Switching Control with Constraints** (with M. Robin). *Communications on Stochastic Analysis* (Volume in Honor of Pao-Liu Chow, Eds.: H. Kuo and G. Yin), Vol. 13, No. 3 2019, pp. 1-29, Article 3. (<https://doi.org/10.31390/cosa.13.3.03>)
- **Discrete-time Control with Non-constant Discount Factor** (with H. Jasso-Fuentes and T. Prieto-Rumeau). *Mathematical Methods of Operations Research*, Vol. 92, No. 2, 2020, pp. 377-399. (<https://doi.org/10.1007/s00186-020-00716-8>)

- **On Ergodic Control of Switching Processes** (with M. Robin). *Communication in Information and Systems* (Volume in Honor of Tyrone Duncan, Eds.: Alain Bensoussan, Sanjoy Mitter, Bozenna Pasik-Duncan and Shing Toung Yau), Vol. 21, No. 4, 2021, pp. 591-621. (<https://dx.doi.org/10.4310/CIS.2021.v21.n4.a4>)
- **On Some Quasi-Variational Inequalities and Other Problems with Moving Sets** (with C.N. Rautenberg). *Journal of Convex Analysis* (Volume in Honor of Umberto Mosco, Eds.: L. Bocardo, G. Buttazzo and I. Italo Capuzzo Dolcetta), Vol. 28, No. 2, 2021, pp. 629-654. (<https://www.heldermann.de/JCA/JCA28/JCA282/jca28036.htm>)
- **Ergodic Switching Control for Diffusion-Type Processes** (with M. Robin). *Probability, Uncertainty and Quantitative Risk* (Special issue dedicated to Alain Bensoussan, Eds.: Buckdahn Rainer, Juan Li and Shige Peng), Vol. 8, No. 1, 2023, pp. 53-74. (<https://doi.org/10.3934/puqr.2023003>)

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>PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS

- **On Final Stopping Time Problems** (with E. Rofman). Proceedings of the "Optimization Techniques IFIP Technical Conference", Novosibirsk, U.S.S.R., July 1974, in *Lecture Notes in Computer Science*, Vol. 27 (G.I. Marchuck, Ed.), Springer-Verlag, Berlin, 1975, pp. 210-211.
- **Sur les Problemes Variationnels Non Coercifs et l'Equation du Transport** (with E. Rofman). Proceedings of the "Mathematical Aspects of Finite Element Methods Conference", Rome, Italy, December 1975, in *Lecture Notes in Mathematics*, Vol. 606 (I. Galligani and E. Magenes, Eds.), Springer-Verlag, Berlin, 1976, pp. 204-209.
- **On the Degenerate Variational and Quasi-Variational Inequalities of Parabolic Type.** Proceedings of the "Fourth International Conference on Analysis and Optimization of Systems", Versailles, France, December 1980, in *Lecture Notes in Control and Information Sciences*, Vol. 28 (A. Bensoussan and J.L. Lions, Eds.), Springer-Verlag, Berlin, 1980, pp. 338-356.
- **On the Role of the Impulse Fixed Cost in Stochastic Optimal Control: An Application to the Management of Energy Production** (with J.P. Quadrat, E. Rofman). Proceedings of the "Tenth IFIP Conference on System Modelling and Optimization", New York City, U.S.A., September 1981, in *Lecture Notes in Control and Information Sciences*, Vol. 38 (R.F. Drenick and F. Kozin, Eds.), Springer-Verlag, Berlin, 1982, pp. 671-679.
- **On Stochastic Control Problems with Impulse Cost Vanishing** (with E. Rofman). Proceedings of the "International Symposium on Semi-infinite Programming and Applications", Austin, Texas, U.S.A., September 1981, in *Lecture Notes in Economics and Mathematical Systems*, Vol. 215 (A.V. Fiacco and K.O. Kortanek, Eds.), Springer-Verlag, Berlin, 1983, pp. 281-294.
- **Optimal Control of Stochastic Integrals and Hamilton-Jacobi-Bellman Equations** (with P.L. Lions). Proceedings of the "Twentieth IEEE Conference on Decision and Control", San Diego, California, U.S.A., December 1981, pp. 1340-1344.
- **Stochastic Control Problem for Reflected Diffusions in a Convex Bounded Domain.** Proceedings of the "IFIP Working Conference on Recent Advances in Filtering and Optimization", Cocoyoc, Mexico, February 1982, in *Lecture Notes in Control and Information Sciences*, Vol. 42 (W.H. Fleming and L.G. Gorostiza, Eds.), Springer-Verlag, Berlin, 1982, pp. 246-255.

- **Stochastic Impulsive Control Problems for Degenerate Reflected Diffusions.** Proceedings of the "1982 American Control Conference", Arlington, Virginia, U.S.A., June 1982, pp. 501-506.
- **On A Class of Singular Stochastic Control Problems** (with M. Robin). Proceedings of the "Second Franco-Southeast Asian Mathematical Conference, Manila, Philippines, June 1982, *Southeast Asian Bulletin of Mathematics*, Vol. 7, No. 2, 1983, pp. 68-95.
- **A Continuous Multi-Echelon Inventory Problem** (with E. Rofman). Proceedings of the "Fourth IFAC/IFIP Symposium on Information Control Problems in Manufacturing Technology", Gaithersburg, Maryland, U.S.A., October 1982, D.E. Hardt, Ed., Pergamon Press, pp. 41-49.
- **Optimal Stochastic Scheduling of Power Generation Systems with Scheduling Delays and Large Cost Differentials** (with G.L. Blankenship). Proceedings of the "Twenty-first IEEE Conference on Decision and Control", Orlando, Florida, U.S.A., December 1982, pp. 472-478.
- **On the Control of a Linear Stochastic System with Finite Horizon** (with P.L. Chow). Proceedings of the "First Army Conference on Applied Mathematics and Computing", Washington D.C., U.S.A., May 1983, ARO Report 84-1, pp. 301-310. **On a Singular Control Problems for Diffusions with Jumps** (with M. Robin). Proceedings of the "1983 American Control Conference", San Francisco, California, U.S.A., June 1983, pp. 1186-1192.
- **Some Singular Control Problems with Long Term Average Criterion** (with M. Robin). Proceedings of the "Eleventh IFIP Conference on System Modelling and Optimization", Copenhagen, Denmark, July 1983, in *Lecture Notes in Control and Information Sciences*, Vol. 59 (P. Thoff-Christensen, Ed.), Springer-Verlag, Berlin, 1984, pp. 424-432.
- **Construction and Control of Reflected Diffusion with Jumps** (with M. Robin). Proceedings of the "Fourth IFIP Working Conference on Stochastic Differential Systems", Marseille, France, March 1984, in *Lecture Notes in Control and Information Sciences*, Vol. 69 (M. Metivier and E. Pardoux, Eds.), Springer-Verlag, Berlin, 1985, pp. 309-322.
- **Some Control Problems of Degenerate Diffusions with Unbounded Cost** (with M. Robin). Proceedings of the "Conference on Recent Mathematical Methods in Dynamic Programming", Rome, Italy, March 1984, in *Lecture Notes in Mathematics*, Vol. 1119 (I. Capuzzo Dolcetta, W.H. Fleming and T. Zolezzi, Eds.), Springer-Verlag, Berlin, 1985, pp. 113-138.
- **Optimal Corrections of Damped Linear Oscillator Under Random Perturbations** (with P.L. Chow). Proceedings of the "Second Army Conference on Applied Mathematics and Computing", Troy, New York, U.S.A., May 1984, ARO Report 85-1, pp. 149-158.
- **A Continuous Time Formulation of Serial Multi-Level Production/Inventory Systems** (with E. Rofman). Proceedings of the "First European Workshop on Real Time Control of Large Scale Systems", Patras, Greece, July 1984, in *Lecture Notes in Control and Information Sciences*, Vol. 67 (G. Schmidt, M. Singh, A. Tittli and S. Tzafestas, Eds.), Springer-Verlag, Berlin, 1985, pp. 613-630.
- **Additive Control of Stochastic Linear Systems with Finite Horizon** (with P.L. Chow, M. Robin). Proceedings of the "Twenty-third IEEE Conference on Decision and Control", Las Vegas, Nevada, U.S.A., December 1984, pp. 1475-1478.
- **A Real Time Scheduling Algorithm** (with N. Dridri, J.M. Proth). Proceedings of the "Twenty-third IEEE Conference on Decision and Control", Las Vegas, Nevada, U.S.A., December 1984, pp. 855-858.
- **On Some Deterministic Optimal Control Problem in the Ergodic Case** (with I. Capuzzo-Dolcetta). Proceedings of the "Seventh International Symposium on the Mathematical Theory of Networks and Systems", June 1985, Stockholm, Sweden, in *Theory and Applications of Nonlinear Control Systems*, (C.I. Byrnes and A. Lindquist, Eds.), North Holland, Amsterdam, 1986, pp. 453-460.
- **An Algorithm to Compute the Viscosity Solution of Hamilton-Jacobi-Bellman** (with E. Rofman). Proceedings of the "Seventh International Symposium on the Mathematical Theory of Networks and

Systems", June 1985, Stockholm, Sweden, in *Theory and Applications of Nonlinear Control Systems*, (C.I. Byrnes and A. Lindquist, Eds.), North Holland, Amsterdam, 1986, pp. 461-467.

- **On the Numerical Solution of a Stochastic Optimal Correction Problem** (with P.L. Chow). Transactions of the "Third Army Conference on Applied Mathematics and Computing", May 1985, Atlanta, Georgia, ARO Report 86-1, pp. 531-546.
- **Error Estimate for the Numerical Solution of a Stochastic Control Problem** (with P.L. Chow). Transactions of the "Third Army Conference on Applied Mathematics and Computing", May 1985, Atlanta, Georgia, ARO Report 86-1, pp. 547-557.
- **Optimal Impulse Correction of a Random Linear Oscillator** (with P.L. Chow). Transactions of the "Fourth Army Conference on Applied Mathematics and Computing", May 1986, Ithaca, New York, ARO Report 87-1, pp. 979-992. **Pulse-Arrival Time for Waves in Turbulent Media** (with P.L. Chow). Transactions of the "Fourth Army Conference on Applied Mathematics and Computing", May 1986, Ithaca, New York, ARO Report 87-1, pp. 993-1002.
- **Bounded Variation Control of a Damped Linear Oscillator Under Random Disturbances**. Proceedings of the IMA Workshop on Stochastic Differential Systems, Stochastic Control and Applications, June 1986, Minneapolis, Minnesota, in *The IMA Volumes in Mathematics and its Applications*, Vol. 10 (W. Fleming and P.L. Lions, Eds.), Springer-Verlag, New York, 1988, pp. 373-394.
- **Additive Control of Stochastic Linear Systems** (with P.L. Chow, M. Robin). Proceedings of the "Twenty-fifth IEEE Conference on Decision and Control", Athens, Greece, December 1986, pp. 140-142
- **Singular Control of Multidimensional Brownian Motion** (with M.I. Taksar). Proceedings of the "Tenth IFAC Congress on Automatic Control", July 1987, Munich, Germany, Vol. 9, pp. 222-225.
- **Variational Inequalities for the Control of Stochastic Partial Differential Equations** (with P.L. Chow). Proceedings of the "Second Conference on Stochastic Partial Differential Equations and Applications", February 1988, Trento, Italy, in *Lecture Notes in Mathematics*, Vol. 1390 (G. DaPrato and L. Tubaro, Eds.), Springer-Verlag, New York, 1989, pp. 42-52.
- **On the Optimal Reward Function of the Continuous Multi-Armed Bandit Problem** (with M. Robin). Proceedings of the "International Conference on Advances in Communications and Control Systems", October 1988, Baton Rouge, Louisiana, U.S.A., Vol. 2 (W.A. Porter and S.C. Kak, Eds.), pp. 1204-1211.
- **Monotone Control of Random Vibrations**. Workshop on Differential Equations (Encuentro de Ecuaciones Diferenciales), December 1988, Buenos Aires, Argentina, in *Trabajos de Matematica*, Vol. 190 (J.E. Bouillet, Ed), 1992, pp. 1-13.
- **On the Numerical Approximation of an Optimal Correction Problem** (with M.C. Bancora-Imbert, P.L. Chow). Proceedings of the "Twenty-seventh IEEE Conference on Decision and Control", December 1988, Austin, Texas, U.S.A., pp. 1570-1574.
- **On Ergodic Control of Reflected Diffusions with Jumps** (with M. Robin). Proceedings of the IEEE International Conference on Control and Applications, April 1989, Jerusalem, Israel, Vol. RA-5-4, pp. 1-4.
- **Pathwise Convergence of Approximate Solutions to Zakai's Equation in a Bounded Domain** (with P.L. Chow, J.L. Jiang). Proceedings of the "Third Conference on Stochastic Partial Differential Equations and Applications", February 1990, Trento, Italy, in *Pitman Research Notes in Mathematics Series*, Vol. 268 (G. DaPrato and L. Tubaro, Eds.), Longman, London, 1992, pp. 111-123.
- **A Multi-Asset Portfolio Selection Problem with Transaction Costs** (M. Akian, A. Sulem). Workshop on "Probabilités Numériques", December 1992, Paris, France, in *Math. Computers in Simulation*, Vol. 38 (1995), no. 1-3, pp. 163--172.
- **Boundary Stabilization of a Nonlinear String with Aerodynamic Force** (with P.L. Chow). Proceedings of the "IFIP Conference on Control of Partial Differential Equations", January 1993, Trento,

Italy, in *Lecture Notes in Pure and Applied Mathematics*, Vol. 165 (G. DaPrato and L. Tubaro, Eds.), Marcel Dekker, New York, 1994, pp. 63-80.

- **Maximum Principles in Unbounded Domains for Integro-Differential Parabolic Operators** (with M.G. Garroni). In "Volume in onore di E. Magenes", *Boundary Value Problems for Partial Differential Equations and Applications* (C. Baiocchi and J.L. Lions, Eds.), RMA-29, Masson, Paris, 1993, pp. 359-365. **Control Ergodico Optimo de Difusiones con Saltos**. Proceedings of "Four Viewpoints of Applied Mathematics (Matemática Aplicada: cuatro puntos de vista)", December 1994, National Academic of Sciences (Academia Nacional de Ciencias Exactas, Físicas y Naturales), Buenos Aires, Argentina, in *Anales Academia Nacional de Ciencias Exactas Físicas y Naturales*, Vol. 47, 1995, pp. 217-235.
- **Ergodic Control of Reflected Diffusions with Jumps** (with M. Robin). Proceedings of the "International Conference on Industrial and Applied Mathematics (ICIAM 95)", July 1995, Hamburg, Germany, in *Zeitschrift für Angewandte Mathematik und Mechanik*, Vol. 76, Suppl. 3, 1996, pp. 359-362.
- **On Some Reachability Problems for Diffusion Processes** (with M. Robin). Proceedings of the "Two-days in honor of Professor Alain Bensoussan on the occasion of his 60th anniversary", December 2000, Paris, France, in *Optimal Control and Partial Differential Equations (Dedicated to A. Bensoussan)*, (J.L. Menaldi, E. Rofman and A. Sulem, Eds.), IOS Press, Amsterdam, 2001, pp. 394-403.
- **Remarks on Impulse Control of Stochastic Navier-Stokes Equations** (with S.S. Sritharan). Proceedings of the "International Workshop on Differential Equations and Optimal Control", March 1999, Ohio University in Athens, in *Lecture Notes in Pure and Applied Mathematics*, Vol. 225 (S. Aizicovici and N.H. Pavel, Eds.), Marcel Dekker, New York, 2002, pp. 245-255.
- **Stochastic Hybrid Optimal Control Models**. Proceedings of the "Symposium in Stochastic Processes", May 2000, Guanajuato, Mexico, (3-hours mini-course), in *Aportaciones Matemáticas*, Vol. 16, Sociedad Matemática Mexicana, 2001, pp. 205-250.
- **Optimal Stopping Time and Impulse Control Problems for the Stochastic Navier-Stokes Equations** (with S.S. Sritharan). Proceedings of the "Fourth Conference on Stochastic Partial Differential Equations and Applications", February 1998, Trento, Italy, in *Lecture Notes in Pure and Applied Mathematics*, Vol. 227 (G. DaPrato and L. Tubaro, Eds.), Marcel Dekker, New York, 2002, pp. 389-404.
- **Optimal Tracking of Stochastic Systems with Bounded Control Force** (with D.V. Iourtchenko). Proceedings of the "Third European Conference on Structural Control (3ECSC)", 12-15 July 2004, Vienna, Austria, Vol 2-s1 (R. Flesch, H. Irschik and M. Krommer Eds.), pp. 171-174.
- **On Hybrid Stochastic Singular Control** (with M. Robin). Proceedings of the "16th IFAC World Congress (IFAC 05)", July 2005, Prague, Czech Republic, (Piztek Ed.), Elsevier Science Ltd, 2006, ISBN: 0-08-045108-X, pp. 860-860.

>RESEARCH ANNOUNCEMENTS

- **Sur le Probleme de Temps d'Arret et l'Inequation Variationnelle Degenerée Associee**. *Comptes Rendus des Seances de l'Academie des Sciences de Paris*, Tome 284, Serie A, 1977, pp. 1443-1446.
- **Sur le Probleme de Controle Impulsionnel et l'Inequation Quasi-Variationnelle Degenerée Associee**. *Comptes Rendus des Seances de l'Academie des Sciences de Paris*, Tome 284, Serie A, 1977, pp. 1499-1502.

- **Problemes de Bellman avec le Controle dans les Coefficients de Plus Haut Degre** (with P.L. Lions). *Comptes Rendus des Seances de l'Academie des Sciences de Paris*, Tome 287, Serie A, 1978, pp. 409-502.
 - **Sur le Probleme de Temps d'Arret pour les Diffusions Reflexies Degeneeres.** *Comptes Rendus des Seances de l'Academie des Sciences de Paris*, Tome 289, Serie A, 1979, pp. 779-782.
 - **Sur le Probleme de Controle Impulsionnel pour les Diffusions Reflexies Degeneeres.** *Comptes Rendus des Seances de l'Academie des Sciences de Paris*, Tome 290, Serie A, 1980, pp. 5-8.
 - **Construction de Processus de Diffusion Reflexis par Penalisation du Domaine** (with P.L. Lions, A.S. Sznitman). *Comptes Rendus des Seances de l'Academie des Sciences de Paris*, Tome 292, Serie I, 1981, pp. 559-562.
 - **Sur Certains Classes de Problemes de Controle Stochastique Singuliers** (with M. Robin). *Comptes Rendus des Seances de l'Academie des Sciences de Paris*, Tome 294, Serie I, 1982, pp. 541-544.
 - **Processus de Diffusion Reflexis avec Sauts** (with M. Robin). *Comptes Rendus des Seances de l'Academie des Sciences de Paris*, Tome 297, Serie I, 1983, pp. 533-536.
 - **Fonction de Green et Densite Invariante pour des Problemes Integro-Differentiels de Deuxieme Ordre** (with M.G. Garroni). *Comptes Rendus des Seances de l'Academie des Sciences de Paris*, Tome 303, Serie I, 1986, pp. 787-790.
-

>ABSTRACTS PUBLISHED IN MEETINGS (w/o Proceedings)

- **Sobre Problemas de Tiempo Final Optimo** (with E. Rofman), Annual Symposium of the Argentine Mathematical Society (Congreso Anual de la Union Matematica Argentina), September 1974, Olavaria, Argentina.
- **Sobre Problemas Variacionales No Coercivos** (with E. Rofman), Annual Symposium of the Argentine Mathematical Society (Congreso Anual de la Union Matematica Argentina), September 1975, Salta, Argentina.
- **Sur le Probleme de Controle Impulsionnel et l'Inequation Quasi-Variationnelle Degeneere Asociee**, Symposium on Quasi-Variational Inequalities (Journées des Inéquations Quasi-Variationnelles), May 1977, Bordeaux, France. (Invited).
- **Probleme de Bellman avec le Controle dans les Coefficients de Plus Haut Degre** (with P.L. Lions), Summer School on Variational Inequalities and Complementary Problems in Mathematical Physics and Economics, June 1978, Erice, Italy.
- **On the Optimal Stopping Time Problem and the Associated Degenerate Variational**, Ninth Conference on Stochastic Process and their Applications, August 1979, Evanston, U.S.A.
- **On a Degenerate Quasi-Variational Inequality of Parabolic Type**, Fifth Latin-American School of Mathematics (Quinta Escuela Latino-Americana de Matematica), July 1980, Mar del Plata, Argentina. (Invited).
- **Introduccion al Problema de Tiempo de Parada Optima para Difusiones**, Second Workshop on Applied Mathematics (Segundo Seminario-Taller de Matematica Aplicada), August 1982, Cali, Colombia. (Invited).
- **Singular Stochastic Control and Variational Inequalities** (with M. Robin). Annual Meeting of the AMS, January 1984, Louisville, Kentucky, U.S.A., Special Session on Partial Differential Equations and Optimal Control Problems. (Invited).

- **Optimal Impulse Control Problems for Degenerate Diffusions with Jumps**, International Conference on Nonlinear Partial Differential Equations and Applications, February 1986, L'Aquila, Italy. (Invited)
- **Remarks on the Multiarmed Bandit Problem for General Continuous Time Markov Processes** (with M. Robin), Workshop on Partial Differential Equations in Stochastic Control and Differential Games, August 1987, Providence, Rhode Island, U.S.A. (Invited)
- **On Asymptotic Behaviour of Stopping Time Problems** (with M. Robin), Workshop on Stochastic Control and Nonlinear Partial Differential Equations, November 1987, Paris, France. (Invited)
- **On the Control of Queueing System with Failures and Repairs** (with M. Robin), The 1988 TIMS/ORSA Joint National Meeting, April 1988, Washington, D.C.
- **Some Preliminary Results on Jitter and Shimmer** (with M.C. Jackson-Menaldi and R. Mathog), The XXII Panamerican Congress of Otorhinolaryngology, Head and Neck Surgery, December 1990, Buenos Aires, Argentina.
- **Una Generalizacion de la solucion de Lame-Clapeyron para el Problema de Stefan a una Fase con Fuente de Energia** (with D.A. Tarzia), Annual Symposium of the Argentine Mathematical Society (Congreso Anual de la Union Matematica Argentina), October 1989, Rosario, Argentina. Revista de la Union Matematica Argentina, Vol. 38, No. 2, 1992, pp. 134-135.
- **Some Error Estimates for Stochastic Control Problems**, Second International Conference on Industrial and Applied Mathematics (ICIAM 91), July 1991, Washington, D.C., U.S.A.
- **Some Results Toward The Objective Evaluation of Voice** (with M.C. Jackson-Menaldi and R. Mathog), Voice Foundation Symposium on the Objective Voice Measurements and Standards, July 1991, Philadelphia, Pennsylvania, U.S.A.
- **Optimal Control and Differential Games with Measures**, IMA Workshop on Nonsmooth Analysis and Geometric Methods in Deterministic Optimal Control, February 1993, Minneapolis, Minnesota, U.S.A. (Invited)
- **Dynamic Programming Equations for Some Infinite Dimensional Stochastic Control Problems**, Fourth Eugene Lukacs Symposium, March 1994, Bowling Green, Ohio, U.S.A. (Invited)
- **A Second Order Integro-differential Equation in the Whole Space**, Annual Meeting of the AMS, May 1997, Detroit, Michigan, U.S.A., Special Session on Partial Differential Equations. (Invited).
- **Quasi-variational Inequalities and Hybrid Control** (with A. Bensoussan), IFIP-TC7 Conference on System Modelling and Optimization", July 1997, Detroit, Michigan, U.S.A. (Invited)
- **Ergodic Control for Diffusion Processes with Jumps** (with M. Robin), 2000 World Congress of Nonlinear Analysts, July 2000, Catania, Sicily, Italy.
- **Optimal Stopping and Impulse Control of Navier-Stokes Equations** (with S.S. Sritharan), 2000 SIAM Annual Meeting, July 2000, Rio Grande, Puerto Rico, USA.
- **On Impulse Control of the Stochastic Navier-Stokes Equations** (with S.S. Sritharan), 2001 SIAM Annual Meeting, July 2001, San Diego, California, USA.
- **Sobre Problemas de Tiempo Final Optimo** (with E. Rofman), Annual Symposium of the Argentine Mathematical Society (Congreso Anual de la Union Matematica Argentina), September 1974, Olavaria, Argentina.
- **Sobre Problemas Variacionales No Coercivos** (with E. Rofman), Annual Symposium of the Argentine Mathematical Society (Congreso Anual de la Union Matematica Argentina), September 1975, Salta, Argentina.
- **Sur le Probleme de Controle Impulsionnel et l'Inequation Quasi-Variationnelle Degenerée Asocíee**, Symposium on Quasi-Variational Inequalities (Journées des Inéquations Quasi-Variationnelles), May 1977, Bordeaux, France. (Invited).

- **Probleme de Bellman avec le Controle dans les Coefficients de Plus Haut Degre** (with P.L. Lions), Summer School on Variational Inequalities and Complementary Problems in Mathematical Physics and Economics, June 1978, Erice, Italy.
- **On the Optimal Stopping Time Problem and the Associated Degenerate Variational**, Ninth Conference on Stochastic Process and their Applications, August 1979, Evanston, U.S.A.
- **On a Degenerate Quasi-Variational Inequality of Parabolic Type**, Fifth Latin-American School of Mathematics (Quinta Escuela Latino-Americana de Matematica), July 1980, Mar del Plata, Argentina. (Invited).
- **Introduccion al Problema de Tiempo de Parada Optima para Difusiones**, Second Workshop on Applied Mathematics (Segundo Seminario-Taller de Matematica Aplicada), August 1982, Cali, Colombia. (Invited).
- **Singular Stochastic Control and Variational Inequalities** (with M. Robin). Annual Meeting of the AMS, January 1984, Louisville, Kentucky, U.S.A., Special Session on Partial Differential Equations and Optimal Control Problems. (Invited).
- **Optimal Impulse Control Problems for Degenerate Diffusions with Jumps**, International Conference on Nonlinear Partial Differential Equations and Applications, February 1986, L'Aquila, Italy. (Invited)
- **Remarks on the Multiarmed Bandit Problem for General Continuous Time Markov Processes** (with M. Robin), Workshop on Partial Differential Equations in Stochastic Control and Differential Games, August 1987, Providence, Rhode Island, U.S.A. (Invited)
- **On Asymptotic Behaviour of Stopping Time Problems** (with M. Robin), Workshop on Stochastic Control and Nonlinear Partial Differential Equations, November 1987, Paris, France. (Invited)
- **On the Control of Queueing System with Failures and Repairs** (with M. Robin), The 1988 TIMS/ORSA Joint National Meeting, April 1988, Washington, D.C.
- **Some Preliminary Results on Jitter and Shimmer** (with M.C. Jackson-Menaldi and R. Mathog), The XXII Panamerican Congress of Otorhinolaryngology, Head and Neck Surgery, December 1990, Buenos Aires, Argentina.
- **Una Generalizacion de la solucion de Lame-Clapeyron para el Problema de Stefan a una Fase con Fuente de Energia** (with D.A. Tarzia), Annual Symposium of the Argentine Mathematical Society (Congreso Anual de la Union Matematica Argentina), October 1989, Rosario, Argentina. Revista de la Union Matematica Argentina, Vol. 38, No. 2, 1992, pp. 134-135.
- **Some Error Estimates for Stochastic Control Problems**, Second International Conference on Industrial and Applied Mathematics (ICIAM 91), July 1991, Washington, D.C., U.S.A.
- **Some Results Toward The Objective Evaluation of Voice** (with M.C. Jackson-Menaldi and R. Mathog), Voice Foundation Symposium on the Objective Voice Measurements and Standards, July 1991, Philadelphia, Pennsylvania, U.S.A.
- **Optimal Control and Differential Games with Measures**, IMA Workshop on Nonsmooth Analysis and Geometric Methods in Deterministic Optimal Control, February 1993, Minneapolis, Minnesota, U.S.A. (Invited)
- **Dynamic Programming Equations for Some Infinite Dimensional Stochastic Control Problems**, Fourth Eugene Lukacs Symposium, March 1994, Bowling Green, Ohio, U.S.A. (Invited)
- **A Second Order Integro-differential Equation in the Whole Space**, Annual Meeting of the AMS, May 1997, Detroit, Michigan, U.S.A., Special Session on Partial Differential Equations. (Invited).
- **Quasi-variational Inequalities and Hybrid Control** (with A. Bensoussan), IFIP-TC7 Conference on System Modelling and Optimization", July 1997, Detroit, Michigan, U.S.A. (Invited)
- **Ergodic Control for Diffusion Processes with Jumps** (with M. Robin), 2000 World Congress of Nonlinear Analysts, July 2000, Catania, Sicily, Italy.

- **Optimal Stopping and Impulse Control of Navier-Stokes Equations** (with S.S. Sritharan), 2000 SIAM Annual Meeting, July 2000, Rio Grande, Puerto Rico, USA.
 - **On Impulse Control of the Stochastic Navier-Stokes Equations** (with S.S. Sritharan), 2001 SIAM Annual Meeting, July 2001, San Diego, California, USA.
-

OTHER PUBLICATIONS

>LECTURE NOTES

- **Lecture Notes of Alain Bensoussan: Teoría Moderna de Control Optimo.** *Cuadernos del Instituto de Matematica Beppo Levi No. 7*, University of Rosario, Argentina, 1974, 71 pp.
- **Lecture Notes of Claudio Baiocchi: Movimiento de un Fluido en Medios Porosos: Enfoque Variacional, Cuasi-Variacional y Numerico.** *Cuadernos del Instituto de Matematica Beppo Levi No. 8*, University of Rosario, Argentina, 1975, 52 pp.
- **Programacion Dinamica Estocastica.** National Workshop of Applied Mathematics (Escuela Nacional de Matematica Aplicada), July-August 1986, San Luis, Argentina, *Cuadernos del Instituto de Matematica Beppo Levi No. 16*, University of Rosario, Argentina, 1989, 103 pp.

>REPORTS

- **Sobre un Problema de Tiempo Final Optimo** (with E. Rofman). *Rapport de Recherche No. 91*, Institute for Research in Computer Science and Automation, France, 1974, 22 pp.
 - **Sur l'Approximation Numerique des Inequations Variationnelles Elliptiques.** *Publicazioni di Laboratorio di Analisis Numerica di C.N.R. No. 140*, University of Pavia, Italy, 1976, 18 pp.
 - **Cahiers de Mathematiques de la Decision**, University of Paris-Dauphine, France, Numbers: 7618, 7909, 7925, 7926, 7927, 7928, 7929, 8022, 8023, 8030, 8031, 8106.
 - **Doctoral Dissertation: Sur les Problemes de Temps D'Arret, Controle Impulsionnel et Continu Correspondant a des Operateurs Degeneres.** These de Doctorat d'Etat Es-Sciences Mathematiques Appliquees, Mention with Distinction (Tres honorable), University of Paris-Dauphine, France, 1980. Board of Examiners: Laurent Schwartz, Jean-Pierre Aubin, Alain Bensoussan, Nicole El Karoui, Roland Glowinski, Jean-Luc Joly, Edmundo Rofman. *INRIA Publications, These d'Etat*, T 050-E, Le Chesnay, France, 1980, 435 pp.
 - **Probabilistic View of Estimates for Finite Difference Methods.** *IMA Preprint Series*, University of Minnesota, Minneapolis, Minnesota, USA, No. 266, 1986, 51 pp.
 - **Variational Approach of Serial Multi-Level Production/Inventory System** (with F. Kabbaj, E. Rofman). *INRIA Publications, Rapports de Recherche*, RR-692, Le Chesnay, France, 1987, 66 pp.
 - **On an Investment-Consumption Model with Transaction Costs** (with M. Akin, A. Sulem). *INRIA Publications, Rapports de Recherche*, RR-1926, Le Chesnay, France, 1993, 37 pp.
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