Julio Dávila

Professor of Economics
Nazarbayev University
julio.davila@nu.edu.kz

Currently

Full Professor
Department of Economics, School of Sciences and Humanities
Nazarbayev University

Previously

Professeur / Professor
CORE - Center for Operations Research and Econometrics
University of Louvain

Directeur de Recherches CNRS / Research Professor (on leave)
Chargé de Recherches   CNRS / Researcher
CES - Centre d'Economie de la Sorbonne
University Paris 1

Assistant Professor
Department of Economics
University of Pennsylvania

Profesor Titular / Associate Professor
Profesor Titular interino / Assistant Professor
Department of Economics and Economic History
University Autónoma de Barcelona

Responsibilities

2020 – …   Director of Graduate Studies, Department of Economics, Nazarbayev University
2014 – 2017   President of the Economics School of Louvain, University of Louvain
2010 – 2014   Co-director, Center for Operations Research and Econometrics, University of Louvain

Education

1994 **PhD in Economics**, DELTA (now PSE - Paris School of Economics), **EHESS**, Paris
1991 **MA   in Economics** (Diplôme d'Etudes Approfondies), DELTA (now PSE), **EHESS**, Paris
1990 **BA   in Economics** (Licenciado), Universidad Complutense de Madrid

Papers

Bank Intermediation, (with E. Lukmanova) working paper (2021)

Bequests or Education
Economic Theory (R&R)

Property Rights and Long-run Capital
Journal of Public Economic Theory (2021)
https://doi.org/10.1111/jpet.12516

The Education Gender Gap and Demographic Transition in Developing Countries (with T. Dao, A. Greulich)
Journal of Population Economics 34, 431–474 (2021)
https://doi.org/10.1007/s00148-020-00787-1

Internalizing Fertility and Education Externalities on Capital Returns
Economic Theory 66(2), 343–373 (2018)
https://doi.org/10.1007/s00199-017-1062-z

Output Externalities on Total Factor Productivity
Macroeconomic Dynamics 21(6), 1389–1452 (2017)
https://doi.org/10.1017/S1365100515000905

The Rationality of Expectations Formation
The B.E. Journal of Theoretical Economics 16(2), 515–543 (2016)
https://doi.org/10.1515/bejte-2014-0082

Efficiency in Overlapping Generations Economies with Longevity Choices and Fair Annuities (with M Leroux)
Journal of Macroeconomics 45, 363–383 (2015)
http://doi.org/10.1016/j.jmacro.2015.06.002

Implementing Steady State Efficiency in OLG Economies with Environmental Externalities (with T. Dao)
Journal of Public Economic Theory 16(4), 620–649 (2014)
https://doi.org/10.1111/jpet.12073

Can Geography Lock a Society in Stagnation? (with Th. Dao)
Economics Letters 120(3), 442–446 (2013)
http://doi.org/10.1016/j.econlet.2013.05.031

Implementing the Best Steady state with Savings in Unbacked Risky Assets
Macroeconomic Dynamics 17(4), 779–801 (2013)
http://doi.org/10.1017/S1365100511000666

Constrained Efficiency in the One-sector Neoclassical Growth Model with Idiosyncratic Uninsurable Shocks
(with J.H. Hong, P. Krusell, and J.V. Ríos Rull)
Econometrica 80(6), 2431–2467 (2012)
http://doi.org/10.3982/ECTA5989

The Taxation of Capital Returns in Overlapping Generations Models
Journal of Macroeconomics 34, 441–453 (2012)
http://doi.org/10.1016/j.jmacro.2011.12.010

Bargaining over Public Goods (with J. Eeckhout and C. Martinelli)
Journal of Public Economic Theory 11(6), 927–945 (2009)
https://doi.org/10.1111/j.1467-9779.2009.01438.x

Competitive Bargaining Equilibrium (with J. Eeckhout)
Journal of Economic Theory, 139, 269–294 (2008)
https://doi.org/10.1016/j.jet.2007.03.001

Local Sunspot Equilibria Reconsidered (with P. Gottardi and A. Kajii)
Economic Theory, 31, 401–425 (2007)
https://doi.org/10.1007/S00199-006-0108-4

Multiplicity, Instability and Sunspots in Games
Journal of Mathematical Economics 39, 197–217 (2003)
https://doi.org/10.1016/S0304-4068(03)00008-9

Sunspot Cycles
Economic Theory 22, 169–192 (2003)
https://doi.org/10.1007/s00199-002-0274-y

Time and Uncertainty in Overlapping Generations Economies
Journal of Economic Theory 100, 356–386 (2001)
https://doi.org/10.1006/jeth.2000.2724

Sunspot Fluctuations in Systems with Memory (with R. Guesnerie)
in **Assessing Rational Expectations,** MIT Press (2001)
ISBN 9780262072076

On the Connection between Correlated and Sunspot Equilibria
in **Current Trends in Economics: Theory and Applications**, A. Alkan *et al.* Eds., Springer-Verlag (1999)
ISBN 978-3-662-03750-8

A Note on the Size of Determinacy and Indeterminacy
Economic Theory 12, 213–223 (1998)
https://doi.org/10.1007/s001990050219

Sunspot Equilibria in Dynamics with Predetermined Variables
Economic Theory 10, 483–495 (1997)

Sunspots and Cycles: The Poincaré-Hopf Approach (with P.-A. Chiappori)
Journal of Mathematical Economics 26, 269–284 (1996)

On Sunspot Equilibria in Overlapping Generations Models
Revista Española de Economía 11, 233–245 (1994)

Research grants, fellowships and awards

Monetary policies and the leverage cycle without a zero lower bound for interest rates
Nazarbayev University, FDCRGP Research Grant 2022-2024 **75.000 USD**

Banking and monetary policy under ultra-low rates
Nazarbayev University, Social Policy Research Grant 2020 **10.000 USD**

Negative and ultra-low interest rates: behavioral and quantitative modelling
ARC (2018-2023) with O. Corneille, C. D'Hont, Ch. Haffner, L. Iania, F. Vrins **747.500 EUR**

Fernand Braudel Fellow
European University Institute (2016) **12.000 EUR**

Optimal Fertility, Health and Education
PDR, F.S.R.-FNRS (2013-2016) **240.400 EUR**

Expectations and Volatility, efficient capital accumulation, and bargaining and auctions
M.I.S. – "Ulysse", FNRS (2009-2011) 2009-10 **399.952 EUR**
2011 **199.980 EUR**

Impact on Growth and Macro Risk Vulnerability of Different Pension Schemes
Grant FRESH 2014-16 for funding a PhD candidate **52.696 EUR**

Impact on Growth and Macro Risk Vulnerability of Different Pension Schemes
Projet FSR (UCL-Banque Nationale de Belgique) (2014-2018) funding a PhD candidate **39.340 EUR**

Stability Gains from Integration and Trade
Cooperation CNRS-Japan Society for the Promotion of Science No. 20262 (2007)

Dynamic Models Applied to Macroeconomics and Growth
Project PB96-1160-C02-02 (1997-2000) Spanish Ministry of Research

Analysis of the Business Cycle and Growth
Project PB95-0130-C02-01 (1996-1997) Spanish Ministry of Research

The Impact of Economic Policies on the Business Cycle and Growth
Project PB92-0120-C02-01 (1993-1996) Spanish Ministry of Research (2008-10)

Post-docs and PhD students funded and supervised

Elizaveta Lukmanova	Post-doc 2019-2021	CORE, U. of Louvain
	now Assistant Professor at KULeuven	
Jonathan Hughes	Post-doc 2016-2017	CORE, U. of Louvain
Elena Mattana	Post-doc 2013-2015	CORE, U. of Louvain
	now Assistant Professor at Aarhus University	

Hiroshi Uno	Post-doc 2009-2011	CORE, U. of Louvain

now Assoc. Prof. at Graduate School of Economics, Osaka Prefecture Univ.

Marie-Louise Leroux   Post-doc 2008-2009   CORE, U. of Louvain
now Associate Professor at Université du Quebec à Montreal

Tiziano Toniolo   PhD student 2019-…   U. of Louvain, in progress

Boris Chafwehe   PhD student 2015-…   U. of Louvain, in progress (co-promoteur)

Andrea Pirrone   PhD student 2013-2018   U. of Louvain
now Economist at the UK Financial Conduct Authority

Vladislav Nora   PhD student 2010-2014   U. of Louvain
now Assistant Professor at Nazarbayev University, Kazakhstan

Anton Belyakov   PhD student 2009-2014   U. of Louvain   (co-promoteur)
now researcher at Lomonosov Moscow State University, Russia

Stéphane Bouché   PhD student 2009-2014   U. of Louvain
now Assistant Professor at the University of the Balearic Islands

Thang Ng. Dao   PhD student 2009-2013   U. of Louvain
now Assistant Professor at Osaka University, Japan

NU master theses supervised

Uldana Abdikarim   *Pension reforms in Kazakhstan using an overlapping generations model*

Alim Kopbayev   *Bank profitability under negative interest rate policy*

Yuliya Andrus   *Is there overinvestment in higher education? The trade-off between continuing studies and gaining work experience*

Last ten years publication track record

Property Rights and Long-run Capital, **Journal of Public Economic Theory,** 23(6), 1261-1286 (2021): Shows that proprietary capital falling into the public domain inefficiently decreases capital accumulation, so that the market steady state consumption underperforms the planner's by 4.6%–9.1% in a neoclassical infinitely-lived agents economy with constant returns to scale and standard empirically supported parameters (10.5% in a similarly parametrized overlapping generations economy). Decentralizing the planner's steady state requires (i) subsidizing the rental rate of private capital at its depreciation rate, and (ii) taxing households' negative net position between, on the one hand, firm and depreciated capital ownership, and on the other, borrowing. The necessary tax rate is smaller the bigger the absolute value of households' negative net position and, hence, the bigger the corresponding monetary real balances held by households.

The Education Gender Gap and the Demographic Transition in Developing Countries: Theory and Evidence (with Th. Dao and A. Greulich) **Journal of Population Economics** 431-474, 34 (2021): Explores, theoretically and empirically, the role of the declining gender gap in education in the demographic transition and the emergence of modern economic growth. Specifically, the paper develops a model in the tradition of the unified growth theory that captures and interconnects the key empirical features of the demographic transition, the decline in gender gap in education, and the transition to sustained growth across less-developed economies.

Internalizing Fertility and Education Externalities on Capital Returns, **Economic Theory** 66(2), 343-373 (2018): Shows how households' inability to internalize the aggregate impact of their fertility and education decisions on the return to savings through the quantity-quality mix of future labor force leads to an inefficient population size and level of skills. The optimal level of population and education is decentralized by linking pension payments to both households' fertility and education investment in their offspring.

Output Externalities on Total Factor Productivity, **Macroeconomic Dynamics** 21(6), 1389-1452 (2017): Shows that the impact that output has on future total factor productivity is not internalized by competitive agents, so that the planner's allocation cannot be reached as a competitive equilibrium outcome (the market remuneration to capital and labor is too low). It can nonetheless be implemented by a fiscal policy subsidizing the returns to savings and the wage rate as needed. The exact policy differs depending on whether only past investment or total output influences productivity: in the first case only capital returns need to be subsidized, whereas in the second case labor income needs to be subsidized too. The policy is balanced period by period by means of a lump-sum tax.

The Rationality of Expectations Formation, **The B.E. Journal of Theoretical Economics** 16(2), 515-543 (2016): Shows that rational expectations can follow from beliefs that explain poorly history, even among those rationalizing agents' choices. Rationally-formed expectations instead –i.e. following from beliefs explaining history better than any other rationalizing choices– allow for additional equilibrium outcomes. This means that the market allocation of resources allows for more instability than previously thought.

Efficiency in Overlapping Generations Economies with Longevity Choices and Fair Annuities (with M.-L. Leroux) **Journal of Macroeconomics** 45, 363–383 (2015): Shows that if individuals can influence their life-expectancy, the market steady state differs from its first-best as individuals fail to anticipate the impact of their longevity-enhancing efforts on the return of their annuitized savings. A policy option for decentralizing the first-best is provided.

Implementing Steady State Efficiency in OLG Economies with Environmental Externalities (with T. Dao) **Journal of Public Economic Theory** 16(4), 620-649 (2014): In an economy with pollution from consumption and production we establish the extent of the inefficiency of the market steady state with a high capital-labor ratio. A tax and transfer policy decentralizing through the market the optimal steady state is provided.

Can Geography Lock a Society in Stagnation? (with Th. Dao) **Economics Letters** 120(3), 442-446 (2013): We identify geographical factors that may lock an economy in Malthusian stagnation. Specifically, we show how the interplay of the available "land", its suitability for living and producing, and its degree of isolation determine whether an economy can escape stagnation.

Implementing the Best Steady State with Savings in Unbacked Risky Assets **Macroeconomic Dynamics** 17(4), 779-801 (2013): I show that the risk of unbacked assets becoming worthless prevents the market from delivering the best steady state saving in those assets. A balanced policy of taxes on returns to capital, subsidies to returns to unbacked assets, and lump-sum transfers is provided to decentralize through the markets the best steady state.

Constrained Efficiency in the One-sector Neoclassical Growth Model with Idiosyncratic Uninsurable Shocks (with J. Hong, P. Krusell, and V. Ríos Rull) **Econometrica** 80(6), 2431-2467 (2012): We investigate the market constrained-efficiency in the presence of uninsurable labor income shocks. We establish that the factor composition of income of the (consumption-)poor is the key determining element. As opposed to what the full-efficiency approach leads to think, for calibrations matching actual income and wealth distributions, the more relevant (for policy purposes) constrained efficiency notion allows seeing that the market leads to a much too low steady-state capital stock.

The Taxation of Capital Returns in Overlapping Generations Models, **Journal of Macroeconomics** 34, 441-453 (2012): A Pareto-improvement upon the market steady state is provided (without intergenerational transfers) by taxing (or subsidizing, if dynamically efficient) the returns to capital, and balancing the budget through a lump-sum transfer (or tax, respectively). This supports the highest steady state utility attainable through markets (i.e. the constrained efficient steady state).

Teaching

Current :

ECON512 Mathematical Economics	Grad	Nazarbayev U.
ECON501 Microeconomics I	Grad	Nazarbayev U.
ECON543 Topics in Macroeconomics	Grad	Nazarbayev U.

Past :

Adv. Mathematics for Economics	PhD	U. of Pennsylvania	2000-03
		U. Aut. de Barcelona	1997-98
Bargaining Theory	PhD/Grad	U. of Louvain	2009
		Paris School of Econ	2006-11
Advanced Microeconomics II	Grad	U. of Louvain	2010-19
Mathematics and Statistics for Economics	Grad	U. of Louvain	2009-19
Advanced Microeconomics I	Grad	U. of Louvain	2009
		U. Aut. de Barcelona	1998
Game theory and Information in Economics	Undergrad	U. of Louvain	2017-19
Mathematics for Economics II	Undergrad	U. of Louvain	2010-19
Intermediate Microeconomics	Undergrad	U. of Pennsylvania	2000-03
Mathematics for Economics 2	Undergrad	U. Aut. de Barcelona	1994-98

Editorial duties

2012-20 **Economics Bulletin**, Associate Editor
2016-19 **Canadian Journal of Economics**, Editorial Advisor

Commissions of trust

2020   Member of the Jury for Senior Researchers, **Insitut Universitaire de France**, France
2017   Reviewer, **Research Grants Council** of Hong Kong, China
2001   Evaluator, **National Science Foundation**, USA

Invited seminars (sample)

NYU AbuDhabi*, Harvard Univ., Univ. of Penn*sylvania, Univ. of California at *Davis, Columbia Univ., Queen Mary Univ.* London, Univ. of *Exeter, Univ. of Tokyo, Univ. of Kent, CORE* UCLouvain, *Tinbergen Institute*, Univ. of *Warwick, Univ. of Maastricht, Univ. Carlos III* de Madrid, Univ. *Pompeu Fabra, Univ. Autonoma de Barcelona, Univ. Catolica Lisbon, PSE* - Paris School of Economics, *ECARES* Univ. Libre de Bruxelles, *KIER* at Kyoto Univ., Univ. of *Brescia*, Institut *Henri Poincaré* ENS, Univ. of *Kobe, Univ. of Zurich, European Univ. Institute*, Univ. of *Bielefeld, Univ. of Antwerp, Nazarbayev* Univ., Univ. *Complutense* de Madrid, Univ. of *Vigo, …*

Academic stays

Kyoto Institute for Economic Research, Univ. of Kyoto	recurrently 2007-18
University of California, Davis	Oct 2017
European University Institute	Spri 2016

Chulalongkorn University, Bangkok	Jan 2012
University of Hongkong	May 2011
National Taiwan University, Taipei	May 2009
University Carlos III de Madrid	Spri 2006
University of Bielefeld	Apr 1999

Organization of international conferences, and workshops

Member of the program committee of the following conferences

Econometric Society European Meeting 98	Berlin	1998
Public Economic Theory 04	Pékin	2004
Conference in Honor of David Cass University of Pennsylvania	Philadelphia	2004
VII Conference of the Society for the Advancement of Economic Theory Vigo		2005
XIII Conference of the Society for the Advancement of Economic Theory	Paris	2013
XIV Conference of the Society for the Advancement of Economic Theory	Tokyo	2014
XV Conference of the Society for the Advancement of Economic Theory	Cambridge UK	2015
CORE @ 50 Anniversary conference	Louvain-la-neuve	2016
XVII Conference of the Society for the Advancement of Economic Theory	Faro	2017
XVIII Conference of the Society for the Advancement of Economic Theory	Taipei	2018
XIX Conference of the Society for the Advancement of Economic Theory	Ischia	2019

Referee for

American Economic Review, Econometrica, American Economics Journal : Macroeconomics, Economic Theory, European Economic Review, International Economic Review, International Journal of Economic Theory, Journal of Economic Dynamics and Control, Journal of Economic Theory, Journal of Economics, Journal of Macroeconomics, Journal of Mathematical Economics, Journal of Public Economic Theory, Macroeconomic Dynamics, Mathematical Social Sciences, Quantitative Economics, Review of Economic Studies, Seoul Journal of Economics, Social Choice and Welfare, Pure and Applied Functional Analysis, Southern Economic Journal, Spanish Economic Review…

Communications to international conferences

Bank Intermediation

World Finance & Banking Symposium 2021
   2021 Corvinus University, Budapest

Property Rights and Long-Run Capital

Summer Workshop in Economic Theory SWET 2019
   2019 Centre d'Economie de la Sorbonne
European Workshop on Economic Theory
   2019 Humboldt-Universität zu Berlin
CRETA Fiscal Policy conference
   2018 University of Warwick

Optimal Human Capital Bequeathing

European Meeting of the Econometric Society
   2018 University of Cologne
European Workshop on General Equilibrium Theory
   2018 Centre d'Economie de la Sorbonne
China Meeting of the Econometric Society
    2018 Fudan University
Society for the Advancement of Economic Theory
    2018 Academia Sinica of Taipei

ASSET Meeting of the Southern European Association for Economic Theory
   2017 Algiers
Asian Meeting of the Econometric Society
   2017 Chinese University of Hongkong
Public Economic Theory 17
   2017 Association of Public Economic Theory, University Paris 2
21st Conference of the International Federation of Operational Research Societies
   2017 Quebec City

On Private Capital Falling into Public Domain

XII REDg Workshop in Quantitative Macroeconomics
   2017 Institut of Economic Analysis of Barcelona
Asian Meeting of the Econometric Society
   2016 Doshisha University of Kyoto

Public Domain

Society for the Advancement of Economic Theory
   2015 University of Cambridge
Society for the Advancement of Economic Theory
   2014 Waseda University, Tokyo
China Meeting of the Econometric Society
   2014 Xiamen University

Optimal Productivity

European Workshop on General Equilibrium Theory
   2013 Institut for Advanced Studies of Vienna
European Meeting of the Econometric Society
   2012 Universidad de Málaga
Public Economic Theory 12
   2012 Association of Public Economic Theory, Academia Sinica of Taipei

Optimal Population and Education

Public Economic Theory 13
   2013 Association of Public Economic Theory, Lisbon
China Meeting of the Econometric Society
   2013 Beijing University
2011 Asian Meeting of the Econometric Society
   2011 Korea University
APET Conference in Honor of Cuong Le Van
   2011 Association of Public Economic Theory, University of Exeter
APET Conference on the Political Economy of Development
   2011 Association of Public Economic Theory, Chulalongkorn University of Bangkok
European Workshop on General Equilibrium Theory
   2011 Baiona, Vigo (Spain)

On the Fiscal Treatment of Life-expectancy Related Choices

Public Economic Theory 10
   2010 Association of Public Economic Theory, Istanbul
European Economic Association
   2010 University of Glasgow
2010 Taipei International Conference on Growth, Trade, and Dynamics
   2010 Academia Sinica of Taipei
European Workshop on General Equilibrium Theory
   2010 Cracow University of Economics
Society for the Advancement of Economic Theory
   2010 National University of Singapore

The Taxation of Savings in Overlapping Generations Economies with Unbacked Risky Assets

Public Economic Theory 09
   2009 Association of Public Economic Theory, Galway
Society for Economic Design 09
   2009 University of Maastricht
Far-Eastern and South-Asian Meeting of the Econometric Society
   2009 University of Tokyo
North-American Summer Meeting of the Econometric Society
   2009 Boston University
European Meeting of the Econometric Society
   2009 University Pompeu Fabra

Constrained-efficient Taxation of Capital

Public Economic Theory 08
   2008 Association of Public Economic Theory, Seoul
European Workshop on General Equilibrium
   2008 Paestum (Italy)
Workshop on Growth with Heterogeneous Agents
   2008 GREQAM Marseilles

Expectations Formations and Volatility

Far Eastern Meeting of the Econometric Society
   2007 Taipei
European Workshop on General Equilibrium Theory
   2007 University of Warwick
VIII Conference of the Society for the Advancement of Economic Theory
   2007 Kos (Greece)
3rd CARESS-Cowles Conference on General Equilibrium and its Applications
   2007 Yale University

Bargaining over Public Goods (with J. Eeckhout et C. Martinelli)

Public Goods, Public Projects and Externalities
   2007 ESF Network Conference, Marseilles
Public Economic Theory 06
   2006 Association of Public Economic Theory, Hanoi
Econometric Society World Congress
   2005 University College London
European Workshop on General Equilibrium
   2005 Universitat Zurich
VII Conference on Current Trends In Economics
   2005 Society for the Advancement of Economic Theory, Vigo (Spain)

Competitive Bargaining Equilibrium (with J. Eeckhout)

European Workshop on General Equilibrium Theory
   2004 International University of Venice
2nd World Congress of the Game Theory Society
   2004 Marseilles
European Meeting of the Econometric Society
   2004 University Carlos III of Madrid
Public Economic Theory 04
   2004 Beijing University
Conference in Honor of Dave Cass
   2004 University of Pennsylvania

Is Bargaining over Prices Efficient? (with J. Eeckhout)

Conference of the Society for Economic Dynamics
2003 University Paris 1

Sunspot Cycles

Summer School in Economic Theory
2002 International University of Venice

Multiplicity, Instability and Sunspots in Games

Annual Meeting of the Latin American and Caribbean Economic Association
2002 Madrid
Conference of the Society for Economic Design
2002 New York University
North-American Summer Meeting of the Econometric Society
2002 UCLA
European Workshop on General Equilibrium Theory
2002 National Technical University of Athens
Winter Meetings of the Econometric Society
2002 Atlanta
Midwest Economic Theory Meeting
2001 Penn State University
V Conference of the Society for the Advancement of Economic Theory
2001 Ischia (Italy)

Reducing Overlapping Generations Economies to Finite Economies

Winter Meeting of the Econometric Society
2001 New Orleans
Econometric Society World Congress
2000 Seattle
Society for Economic Design Conference
2000 Istanbul

Local Sunspot Equilibria Revisited (with P. Gottardi and A. Kajii)

IV Conference of the Society for the Advancement of Economic Theory
1999 Rhodes (Greece)
European Workshop on General Equilibrium Theory
1999 University of Copenhagen

Time and Uncertainty in Overlapping Generations Models

European Meeting of the Econometric Society
1998 Humboldt University of Berlin
Workshop on General Equilibrium
1998 University Ca' Foscari of Venise

On the Connection between Correlated and Sunspot Equilibria

Workshop on General Equilibrium
1997 University Ca' Foscari of Venise
SEDC Annual Meeting of the Society for Economic Dynamics and Control
1997 Oxford
III Conference of the Society for the Advancement of Economic Theory
1997 Antalya (Turkey)

European Meeting of the Econometric Society
   1997 University of Toulouse
ASSET Meeting of the Southern European Association for Economic Theory
   1997 Marseilles

A Note on the Size of Determinacy and Indeterminacy

Workshop on General Equilibrium
   1996 University Ca' Foscari of Venice
SEDC Annual Meeting of the Society for Economic Dynamics and Control
   1996 ITAM Instituto Tecnológico Autónomo de México
XIV Latin American Meeting of the Econometric Society
   1996 IMPA Institut for Pure and Applied Mathematics
European Meeting of the Econometric Society
   1996 Bosphorus University
ASSET Meeting of the Southern European Association for Economic Theory
   1996 University of Alicante

On the robustness of sunspot phenomena in dynamical systems

Winter Simposium of the Econometric Society
   1995 Studienzentrum Gerzensee

Cycles and Sunspots: the Poincare-Hopf approach (with P.-A. Chiappori)

SEDC Annual Meeting of the Society for Economic Dynamics and Control
   1995 University Pompeu Fabra
Workshop on Topology, Geometry and Markets
   1994 Fields Institut for Research in Mathematical Sciences, Waterloo, (Canada)

Sunspot Fluctuations and Dynamics with Memory

Econometric Society European Meeting
   1993 University of Uppsala
VIII Annual Congress of the European Economic Association
   1993 University of Helsinki
ASSET Meeting of the Southern European Association for Economic Theory
   1993 University Pompeu Fabra