

Luciano Irineu de Castro Filho

Associate Professor (with tenure)
Tippie College of Business, University of Iowa
Brazilian Citizen, US permanent resident

[webpage](#)

Tel.: 1(319) 335-0963

e-mail: decastro.luciano@gmail.com

RESEARCH INTERESTS

Auction Theory, Market Design, Energy Markets, Decision Theory, Microeconomics.

PROFESSIONAL ACTIVITIES

Associate Professor (with tenure) - Tippie College of Business, University of Iowa, 2014-present.

Assistant Professor - MEDS, Kellogg School of Management, Northwestern University - 2010-2014

Assistant Professor - Univ. of Illinois at Urbana-Champaign - 2007 - 2010.

Visiting Assistant Professor - MEDS, Kellogg School of Management, Northwestern University, Fall 2008.

Visiting Professor - Univ. Carlos III de Madrid, from Sep 2005 - Jul 2007.

Post-doc researcher - IMPA, 2004 - September 2005.

Telecommunication Engineer, responsible for spectrum issues, Officer, Brazilian Air Force, Telecommunications Division. (1997-2000).

Electronic Engineer, Officer, Brazilian Air Force, Aerospace Technological Center (1996-1997).

EDUCATION

PhD, 2004, Mathematical Economics, IMPA. Thesis: "Pure Strategy Equilibria in Auctions Under More General Assumptions". Advisor: Aloisio Araujo.

Master in Sciences, 2001, Mathematical Economics, IMPA.

MBA, Getulio Vargas Foundation, 1999.

Electronic Engineer, 1995, ITA (Aeronautics Technological Institute).

OTHER PROFESSIONAL ACTIVITIES

Associate Editor for Economic Theory (since March 2010).

Referee for: American Economic Review, Econometrica, Journal of Economic Theory, Games and Economic Behavior, Economic Theory, International Economic Review, International Journal of Game Theory, Journal of Mathematical Economics, Annals of Finance, The B.E. Journal of Theoretical Economics, Journal of Economics and Management Strategy, Brazilian Review of Econometrics, European Journal of Operational Research, Mathematics of Operations Research and Journal of Human Capital.

Member of the organizing committee of: XXVII meeting of the Brazilian Econometric Society (2005); Spring 2008 Midwest Conference Economic Theory; and 2009 SAET conference.

Consultant for the Electricity Energy Auction in Brazil, in December 2005. Getulio Vargas Foundation and Brazilian Ministry of Finance (August-November 2004).

Member of the PhD Thesis Committee: Gino Loyola, Dep. Economics, Universidad Carlos III de Madrid, July 22, 2008; Angelo Silva, Dep. Economics Universidade de Brasilia, August 12, 2010.

TEACHING EXPERIENCE

Graduate Level: Multi-Unit and Combinatorial Auctions, Spring 2008 and 2009, UIUC. Microeconomics, General Equilibrium Theory, Dynamic Economics, Introduction to Finance and Introduction to Econometrics (Time Series) – at IMPA, from 2003 to 2005.

MBA: Microeconomics (MECN-430), Kellogg School of Management, Fall 2008, and Competitive Strategy and Industrial Structure (MECN-441), Summer 2010, Spring 2011, 2012 and 2013.

For Professionals: Credit scoring models – four editions of a course for professionals, promoted by FCE, in 2005 and 2006.

Undergraduate level: Intermediate Micro, UIUC, Spring 2008 and 2010. Calculus and Linear Algebra, for economics students of Universidad Carlos III in Madrid (2005 and 2006).

MAIN PUBLICATIONS

[“Corrigendum to "Existence of Equilibrium in Single and Double Private Value Auctions"”](#), *Econometrica*, vol. 74, 6, November 2006, 1723-4.

[“Non-monotonicities and the all-pay auction tie-breaking rule”](#), *Economic Theory* vol. 35, 4, June 2008, 407-440. (Co-authors: A. Araujo and H. Moreira.)

[“Pure Strategy Equilibria of Single and Double-Auctions with Interdependent Values”](#), *Games and Economic Behavior*, vol. 65, 1, 25-48, January 2009. (Co-author: A. Araujo.)

[“Characterization of Bidding Behavior in Multi-Unit Auctions,”](#) *Journal of Mathematical Economics*, 45, 559-575, 2009. (Co-author A. Riasco.)

[“Testing Affiliation in Private-Values Models of First-Price Auctions Using Grid Distributions,”](#) *Annals of Applied Statistics*, vol. 4 (4), 2073 – 2098, 2010. (Co-author: Harry Paarsch.)

[“Equilibrium Existence and Approximation of Regular Discontinuous Games”](#), *Economic Theory*, 48, 67-85, 2011.

[“Tougher Educational Exam Leading to Worse Selection,”](#) *Economics: The Open-Access, Open-Assessment E-Journal*, v. 5, 2011-17, 2011. (Co-author: Eduardo Andrade)

[“Ambiguity aversion and Trade”](#), *Economic Theory*, 48, 243-273, 2011. (Co-author: A. Chateauneuf)

[Core and Equilibria under ambiguity](#), *Economic Theory*, 48, 519-548, 2011. (Co-authors: M. Pesce and N. Yannelis).

[Paying for the Smart Grid](#), *Energy Economics*, 40 (supplement 1), S74-S84, 2013. (Co-author: Joisa Dutra)

[Parametric Representation of Preferences](#), *Journal of Economic Theory*, 150, 642-667, 2014. (Co-author: Nabil Al-Najjar)

"[Free entry versus socially optimal entry](#)." *Journal of Economic Theory* 154 (2014): 112-125. (Co-authors: Rabah Amir and Leonidas Koutsougeras)

Transition to Centralized Unit Commitment: An Econometric Analysis of Colombia's Experience, forthcoming, *The Energy Journal*, 37, 3. (co-authors: Alvaro Riascos, Miguel Bernal, Shmuel Oren)

Implementation under Ambiguity, forthcoming, *Games and Economic Behavior*. (co-authors: Nicholas Yannelis and Zhiwei Liu).

OTHER PUBLICATIONS

"[Product Definition for Future Electricity Supply Auctions: The 2006 Illinois Experience](#)," *The Electricity Journal*, vol. 21, 7, 50-62, Aug.-Sept. 2008. (Co-authors: Matias Negrete-Pincetic and George Gross.)

"[Response to Cavichi and Lemon: Our Analysis was Thorough](#)" *The Electricity Journal*, vol. 22, 1, 5-12, Jan.-Feb. 2009. (Co-authors: Matias Negrete-Pincetic and George Gross.)

"[How to translate results from auctions to procurement](#)," *Economic Letters*, vol. 106 (2), p. 115-118, 2010. (Co-author: M. Angeles de Frutos.)

[The Economics of the Smart Grid](#), Proceedings of IEEE 49th Annual Allerton Conference on Communication, Control, and Computing, 1294-1301, 2011. (Co-author: Joisa Dutra)

[Equilibria Existence and Characterization in Auctions: Achievements and Open Questions](#), *Journal of Economic Surveys*, 26(5), 911-932, 2012. (Co-author: Dan Karney.)

"[Subjective Probability](#)," *Wiley Encyclopedia of Operations Research and Management Science*, 2011. (Co-author: Nabil Al-Najjar.)

[Prediction Markets To Forecast Electricity Demand](#), Proceedings of IEEE 50th Annual Allerton Conference on Communication, Control, and Computing, 1097-1104, 2012. (Co-author: Peter Cramton)

[An Interpretation of Ellsberg's Paradox Based on Information and Incompleteness](#), *Economic Theory Bulletin*, 1 (2), 139-144, 2013. (co-author: Nicholas Yannelis)

Electricity supply auctions: Understanding the consequences of the product definition, *International Journal of Electrical Power and Energy Systems*, Volume 64, January 2015, Pages 285-292, January 2015. (co-authors: **M. Negrete-Pincetic**, and H. Pulgar-Painemal)

PUBLICATIONS IN PORTUGUESE

Book: "[Uma Introdução à Teoria da Escolha](#)" (with H. Faro), IMPA, 2005.

[Combate à Corrupção em Licitações Públicas](#). Compras Públicas, 1, 3, Setembro 2008, 53-70.

COMPLETED WORKING PAPERS

[Affiliation, Equilibrium Existence and Revenue Ranking of Auctions](#)¹

[A Subjective Foundation for Objective Probabilities](#), with Nabil Al-Najjar²

[Uncertainty, Efficiency and Incentive Compatibility](#), with Nicholas Yannelis

[Correlation of Types in Bayesian Games](#)

[A new perspective to rational expectations: maximin rational expectations equilibrium](#), with Marialaura Pesce and N. Yannelis.

[Free entry versus socially optimal entry](#), with Rabah Amir and Leonidas Koutsougeras

[Nash Equilibrium in Games with Quasi-Monotonic Best-Responses](#), with Rabah Amir

UNCOMPLETED WORKING PAPERS

Monotonic Selections and Comparative Statics, with Rabah Amir

On the Design of Electricity Markets, with Rakesh Vohra

Grid distributions to study single object auctions

Strategies of the Weak, with Sandeep Baliga and Alvaro Sandroni

REPORTS AND APPLIED PAPERS

An Evaluation of CREG 051 – 2009 Regulatory Intervention in Colombian Electricity Market, with Shmuel Oren and Alvaro Riascos

ORGANIZED WORKSHOPS ON ELECTRICITY MARKETS

I organized three workshops on electricity markets:

[Challenges for Electricity Markets](#), in May 2012

[Wholesale Electricity Markets: Hurdles to Overcome](#), in January 2013.

¹ This paper was "conditionally accepted" in the *Journal of Economics & Management Strategy*.

² This paper received a Revise & Resubmit from *Transactions of the American Mathematical Society*.

[Heartland Electricity Dialog](#), in April 2014.

HONORS

ISEN Booster Award 2013.

First Prize, Economic Theory Best Paper Award, Brazilian Econometric Society meeting, Recife, December 2012.

Haralambos Simeonidis Prize - National Association of Economic Schools (ANPEC) - to the best thesis in economics, December 2004.

Institutional Capacitation Program - Ministry of Science and Technology - Research Grant 2004-2005.

Member of Brazilian delegation to International Mathematical Olympiad (1990).

Brazilian Mathematical Olympiad, 1989, 2nd place.

Ceara's Mathematical Olympiad, 1st place in 1987, 1988, 1990.

ACADEMIC VISITS

Hausdorff Research Institute of Mathematics, Bonn University, Summer Program - Stochastic Dynamics in Economics and Finance, August 5 - 22, 2013.

Univ. Paris I - Soborne, CERMSEM, France, June 2010.

Universidad Carlos III de Madrid, March 2010.

MEDS, Kellogg School of Management, Northwestern University, Fall 2008, Summer 2009.

Penn State University, December 2007.

Univ. Federal do Ceará, July 2007.

Washington University, St. Louis, USA, September - October 2006.

Univ. do Porto, Portugal, September 2006.

Univ. Carlos III de Madrid, October 2005 - July 2007.

Univ. Paris I - Soborne, CERMSEM, France, June 2006.

Univ. de los Andes and Banco de la República, Bogotá, Colombia, July-August 2005.

Univ. Toulouse I, Toulouse, France, December 2004.

Univ. Paris I - Soborne, CERMSEM, France, November 2004.

CONFERENCES AND WORKSHOPS WITH PRESENTATIONS

Presentation of the Final Report on CREG Resolution 051-2009, Bogota, Colombia, November 25, 2013 (see outside activities at the end of the CV).

Brazilian Electricity Market: a discussion with the Brazilian Chamber of Commerce for Electricity, Getulio Vargas Foundation, October 16, 2013.

2013 Informs Annual Meeting, Minneapolis Convention Center, Minneapolis, October 6-9, 2013.

3th Great Lakes Symposium on Smart Grid, Illinois Institute of Technology,
Chicago, IL, September 23-25, 2013.

Workshop: Modeling Market Dynamics and Equilibrium – New Challenges, New
Horizons, Hausdorff Institute of Mathematics, Bonn University, August 19-22,
2013.

2013 Asian Meeting of the Econometric Society (AMES2013), National University of
Singapore, Singapore, August 2-4, 2013.

13th SAET Conference on Current Trends in Economics, MINES ParisTech, Paris,
France, July 22-27, 2013.

2013 Economic Science Association World Meetings, Zurich, Switzerland, July 11-14,
2013.

Mannheim Energy Conference, June 24-25, 2013.

2012 Annual meeting of the Brazilian Econometric Society, Recife, Brazil, 2012.

Interdisciplinary Workshop on Smart Grid Design & Implementation, Dec. 7-8, 2012,
Gainesville, FL

31st USAEE / IAEE North American Conference, Sheraton Austin, Texas, November
4-7, 2012.

UECE Lisbon Meetings 2012 Game Theory and Applications, Lisbon, Portugal,
October 18-20, 2012.

Informa Annual Meeting, Austin, Texas, October 15-16, 2012.

IEEE 50th Annual Allerton Conference on Communication, Control, and
Computing, Monticello, IL, October 1-5, 2012.

NSF GE conference in Indiana University, September 28-29, 2012.

27th Annual Congress of the European Economic Association | 66th European
Meeting of the Econometric Society, Malaga, Spain, August 27-31, 2012.

4th World Congress of the Game Theory Society, Istanbul, Turkey, July 22-26, 2012.

Foundations and Applications of Utility, Risk and Decision Theory (FUR) Georgia
State University, Atlanta, Georgia, USA, June 30 - July 3, 2012

5th Atlantic Workshop on Energy and Environmental Economics, June 25-26, 2012,
in A Toxa, Galicia, Spain.

2012 Decentralization Conference, Caltech, March 30 – April 1st, 2012.

10th International Industrial Organization Conference, George Mason University
School of Law, Washington, DC, March 16-18, 2012.

2012 ASSA Meetings, Chicago, January 8, 2012.

2011 NBER Conference on Market Design, Boston, October 28-29, 2011.

2011 NBER General Equilibrium Workshop, Iowa City, October 7-9, 2011.

IEEE 49th Annual Allerton Conference on Communication, Control, and
Computing, Monticello, IL, September 28-30, 2011.

2011 Stony Brook Conference, Stony Brook, July, 2011.

2011 European General Equilibrium Workshop, Vigo, Spain, June 2011.

2011 CAPCP Conference on Auctions and Procurements, Penn State University,
April 28- May 1, 2011.

2011 Decentralization Conference, Ohio State University, May, 2011.

Informs Analytics, Marriot Hotel, Chicago, April 10-12, 2011.

Decentralization Conference, Ohio State University, April 1 -3, 2011.

Workshop on Equilibrium Analysis Under Ambiguity, Naples, Italy, Jan 28-29, 2011.

INFORMS Annual meeting, Austin, Texas, November 7-9, 2010.

Third Transatlantic Conference, Trinity College, Oxford, September 14-16, 2010.

2010 RUD (Risk, Uncertainty and Decision) conference, Paris, June 30 – July 2.

2010 CAPCP Conference on Auctions and Procurements, Penn State University,
State College, PA, April 29- May 2, 2010.

GE in Rio, Rio de Janeiro, RJ, March 10-12, 2010.

Midwest Economic Theory conference, Penn State, October 2009.

Second Transatlantic Theory Workshop, Northwestern University, September 11-13,
2009.

2009 European Meeting of the Econometric Society, Barcelona, August 23-27, 2009.

9th SAET Conference on Current Trends in Economics, Ischia, Italy, June 29-July 5,
2009.

Sorbonne Workshop in Economic Theory (SWET 2009), Paris, June 24-27, 2009.

2009 Cowles Summer Conference, Economic Theory, Yale University, June 22-23,
2009.

2009 Risk, Utility and Decision (RUD) Conference, Duke University, June 18-21,
2009.

7th International Industrial Organization Conference, Northeastern University,
Boston, April 3-5, 2009.

2009 CAPCP Conference on Auctions and Procurements, Penn State University,
State College, PA, March 26-29, 2009.

Conference in Honor of Ehud Kalai's 66th birthday, Northwestern University,
October 24 and 25, 2008.

Third World Congress of the Game Theory Society, Northwestern University, July
2008.

Transmission Business School, University of Illinois, Chicago, June 16-20, 2008.

2008 Cowles Summer Conference, Economic Theory: "Choice, Contracts and
Computation", Yale University, June 9-10, 2008.

6th International Industrial Organization Conference, Marymount University,
Arlington, Virginia, May 16-18, 2008.

Spring 2008 Midwest Conference Economic Theory, joint with a conference in honor
of Wayne Shafer, University of Illinois, May 2-4, 2008.

2008 CAPCP Conference on Auctions and Procurement, Penn State University, April
2008.

American Economic Association Annual Meeting, New Orleans, January 2008.

Conference in Honor of Roko Aliprantis, University of Kansas, November 2007.

Mathematical Economics Workshop, IMPA, Rio de Janeiro, December 2006.

RUD - Risk, Uncertainty and Decision, Paris, June 2006.

Stony Brook Game Theory Festival, Stony Brook, July 2006.

World Congress of Econometric Society, London, Aug 2005.

Colombian Mathematical Congress, Bogota, Aug 2005.

Decentralization Conference, Urbana-Champaign, April 2005.

Stony Brook Game Theory Festival, Stony Brook, July 2005.

Latin American Meeting of Econometric Society, São Paulo, July 2004.

Mathematical Economics Workshop, IMPA, Rio de Janeiro, July 2004.

PARTICIPATION IN OTHER CONFERENCES / TECHNICAL VISITS

International Conference on Regional Carbon Policies, organized by the Program on
Energy and Sustainable Development (PESD) - Stanford University, at Koret-
Taube Conference Center, December 5, 2013.

Visit to IBM Client Center for Advanced Analytics, Columbus, Ohio, November 12,
2013 (as part of the Business Analytics program in Kellogg).

California Independent System Operator (CAISO) Long-term resource adequacy
summit, San Francisco, California, February 26, 2013.

Meeting at Exelon Corporation office, Washington, DC, Nov. 13, 2012.

Annual Meeting of the National Association of Regulatory Utility Commissioners
(NARUC), Baltimore, MD, Nov 10-11, 2012.

Visit to Electric Reliability Council of Texas (ERCOT), Austin, Texas, November 7,
2012.

Visit to Midwest Independent System Operator (MISO), Carmel, IN, Oct. 30, 2012.

Visit to MISO, St. Paul, MN, Oct. 26, 2012.

Great Lakes Symposium on Smart Grid and the New Energy, Illinois Institute of
Technology, September 24-26, 2012.

TALKS AT UNIVERSITIES

Getulio Vargas Foundation, Rio de Janeiro, April, 9, 2014.
Harvard – MIT joint economic theory seminar, October 3, 2013.
Iowa University, Iowa City, IA, March 27, 2013.
University of Arizona, Tucson, AZ, December 3, 2012.
Getulio Vargas Foundation, Rio de Janeiro, Brazil, October 11, 2012.
Guelph University, Toronto, Canada, March 2nd, 2012.
Department of Economics, Washington University, St. Louis, October 24, 2011.
Fundação Getulio Vargas, Rio-Brazil, December 14, 2010.
Krannert Graduate School of Management, Purdue University, October 28, 2010.
Tepper School of Business, Carnegie Mellon University, October 8, 2010.
Ohio State Universe, Columbus, Ohio, April 16, 2010.
Universidad Complutense de Madrid, Madrid, Spain, March 23, 2010.
Pontificia Universidade Católica do Rio de Janeiro (PUC-Rio), December 9, 2009.
University of Pennsylvania, October 7, 2009.
University of Maryland, October 6, 2009.
Johns Hopkins University, October 5, 2009.
Univ. of Minnesota, March 2009.
Univ. of Iowa, April 2008.
Univ. of Illinois at Urbana-Champaign, Feb 2008.
Indiana University, October 2007, Sept 28, 2007.
Univ. Federal do Ceará, Jul. 2007.
Getulio Vargas Foundation, Mar 2007.
Univ. of Illinois at Urbana-Champaign, Mar 2007.
Pennsylvania State University, Jan 2007.
Universitat Pompeu Fabra, Oct 2006.
Univ. of Illinois at Urbana-Champaign, Oct 2006.
Washington University in St. Louis, Oct 2006.
Washington University in St. Louis, Sep 2006.
Universidade do Porto, Sep 2006.
Universidad de Santiago de Compostela, Sep 2006.
Université Paris I - CERMSEM, Jun 2006.
Universidad Carlos III, Apr 2006.
Universidad Nacional de Bogotá, Colombia, Aug 2005.
Universidade Federal do Ceará, Brazil, July 2005.

Université Toulouse 1 - Sciences Sociales - GREMAQ, Dec 2004.

Université Paris I - CERMSEM, Dec 2004.

Getulio Vargas Foundation, Rio de Janeiro, 2004.

Pontificia Universidade Católica do Rio de Janeiro (PUC-Rio), 2003.

IBMEC, Rio de Janeiro, 2003.

OTHER PROFESSIONAL ACTIVITIES

In October-November 2014, I consulted for Tractebel, an electricity company subsidiary of Duke Energy in Brazil, in preparation of a report submitted to the Brazilian Electricity Regulatory Agency (Aneel), about proposed changes in the rules for the formation of the price of liquidation of differences in the Brazilian market.

I was one of the keynote speakers of the Smart Grid Interoperability Panel (SGIP) [2014 Annual Conference](#), in Nashville, Tennessee on September 15-18, 2014.

In the second half of 2013, I prepared a report about the Colombian Electricity market for the Colombian Regulatory Commission for Energy and Gas (CREG), analyzing the impact of change from decentralized to centralized unit commitment in Colombia. I did this project with Alvaro Riascos (Universidad de los Andes) and Shmuel Oren (University of California at Berkeley). We found out that a resolution by CREG has increased the economic efficiency, but generators were able to capture most of the gains, due to an increase in market power. This report was later converted in an academic paper, which is now forthcoming in Energy Journal.

Previously, I consulted for Getulio Vargas Foundation, in Brazil, in consulting projects to the Brazilian government, helping to design auctions for electricity contracts and airports.

Last Revision: October 31, 2015.