# Curriculum Vitae. Davide Erminio Pirino, PhD.

CONTACT Via Francesco Rismondo 31,

Information 56123 Pisa,

Italy.

Mobile: (+39) 347-4897561 mail: davide.pirino@gmail.com

Date of Birth May, 3, 1981.

CITIZENSHIP Italian.

CURRENT POSITION

\* From June 2016 to today, Senior Assistant Professor, Department of Economics and Finance, University of Rome "Tor Vergata".

# PREVIOUS POSITIONS

- ★ From October 2015 to May 2016: Junior Assistant Professor, Faculty of Sciences, Scuola Normale Superiore, Pisa.
- ★ From October 2013 to September 2015: Post-Doctoral Researcher, Faculty of Sciences, **Scuola Normale Superiore**, Pisa.
- \* From March 2009 to March 2013: Post-Doctoral Researcher, Laboratory of Economics and Management (L.E.M.), Sant'Anna School of Advanced Studies, Pisa.

#### EDUCATION

★ From January 2006 to March 2009: PhD in Physics, Galileo Galilei School of Graduate Studies, University of Pisa.

Final Dissertation: Theoretical and empirical essays on the dynamics of financial and energy markets.

Advisor: Prof. Roberto Renò.

★ From October 2002 to March 2005: M.S., Physics, University of Pisa.

Magna cum Laude in Condensed Matter Physics.

\* From October 1999 to October 2002: B.S., Physics, University of Pisa.

Magna cum Laude in Condensed Matter Physics.

# Publications

\* The Impact of systemic and illiquidity risk on financing with risky collateral.

Fabrizio Lillo and Davide Pirino.

Journal of Economic Dynamics and Control, 2015, Volume 50, Issue 1, Pages 180-202.

- \* Zipf law and the firm size distribution: a critical discussion of popular estimators. Giulio Bottazzi, Davide Pirino and Federico Tamagni.

  Journal of Evolutionary Economics, Volume 25, Issue 3, 2015, pages 585-610.
- \* Detecting correlations among functional-sequence motifs.

  \*Davide Pirino, Jacopo Rigosa, Alice Ledda and Luca Ferretti.

  Physical Review E, Volume 85, Issue 6, 2012, Pages 066124-11.
- \* Threshold bipower variation and the impact of jumps on volatility forecasting. Fulvio Corsi, Davide Pirino and Roberto Renó.

  Journal of Econometrics, Volume 159, Issue 2, 2010, Pages 276-288.

\* Electricity prices: a non-parametric approach.

Davide Pirino and Roberto Renó.

International Journal of Theoretical and Applied Finance, Volume 13, Issue 2, 2010, Pages 285-299.

 $\star$  The extraction of natural resources: the role of thermodynamic efficiency.

Antonio Roma and Davide Pirino.

Ecological Economics, Volume 68, Issue 10, 2009, Pages 2594-2606.

 $\star$  Jump detection and long range dependence.

Davide Pirino.

Physica A: Statistical Mechanics and its Applications, Volume 388, Issue 7, 2009, Pages 1150-1156.

 $\star$  The influence of the astrocyte field on neuronal dynamics and synchronization.

Paolo Allegrini, Leone Fronzoni and Davide Pirino.

Journal of Biological Physics, Volume 35, Issue 4, 2009, Pages 413-423.

#### WORKING PAPERS

\* Assessing Systemic Risk Due to Fire Sales Spillover Through Maximum Entropy Network Reconstruction.

\*Domenico Di Gangi, Fabrizio Lillo and Davide Pirino.

http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2639178

 $\star$  Measuring flight-to-quality with Granger-causality tail risk networks.

Fulvio Corsi, Fabrizio Lillo and Davide Pirino.

http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2576078

 $\star$  Excess Idle Time.

Federico Bandi, Davide Pirino and Roberto Renó.

http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2199468

 $\star$  Measuring industry relatedness and corporate coherence.

Giulio Bottazzi and Davide Pirino.

http://ideas.repec.org/p/ssa/lemwps/2010-10.html

#### RESEARCH GRANTS

#### As Principal Investigator:

\* June 2015. A New Measure of Liquidity. Granted by Italian Ministry of Education, Universities and Research under the program SIR (Scientific Independence of Young Researchers).

Grant: 302.720 EUR.

\* December 2014. Commonality in Liquidity and Systemic Risk.. Granted by Scuola Normale Superiore, Junior Researchers Projects 2014.

Grant: 95.00 EUR.

In collaboration:

\* A New Measure of Liquidity in Financial Markets.

Granted by Europlace Institute of Finance, Louis Bachelier Grant.

Grant: 10.000 EUR. Principal Investigator: Prof. Roberto Renó.

\* The growth of firms and countries: distributional properties and economic determinants.

Granted by the Italian Ministry of University and Research as part of the PRIN 2009 program.

Grant: 456.380 EUR. Principal Investigator: Prof. Giulio Bottazzi.

EXPERIENCES ABROAD, CONFERENCE TALKS AND INVITED SEMINARS

# \* Vienna University of Economics and Business.

Vienna Congress on Mathematical Finance, 12-14 September 2016.

• Talk on working paper: "EXcess Idle Time".

# \* Palais des congrés de Montréal, Canada.

11<sup>th</sup> World Congress of the Econometric Society, 17-21 August 2015.

• Talk on working paper: "EXcess Idle Time".

# $\star$ University of Parma.

XVI Workshop on Quantitative Finance, 29-30 January 2015.

• Talk on working paper: "Measuring flight-to-quality with Granger-causality tail risk networks".

# \* Group Risk Methodologies & Architecture, UniCredit Tower, Milan.

Invited Seminar, January 2015.

• Talk on working paper: "Measuring flight-to-quality with Granger-causality tail risk networks".

# \* Group Risk Methodologies & Architecture, UniCredit Tower, Milan.

Invited Seminar, January 2014.

• Talk on working paper: "The Impact of systemic and illiquidity risk on financing with risky collateral".

#### \* Rimini Campus of the University of Bologna, Rimini.

XIV Workshop on Quantitative Finance, 23-24 January 2013.

• Talk on working paper: "EXcess Idle Time".

# $\star$ University of Siena.

Invited Seminar, January 2013.

• Talk on working paper: "Measuring Industry Relatedness and Corporate Coherence".

# $\star$ University of Pantheon-Assas, Paris II.

WEHIA 2012: 17th Annual Workshop on Economic Heterogeneous Interacting Agents, 21-23 June 2012.

• Talk on working paper: "Power Laws and the Firm Size Distribution".

#### \* UNU-MERIT & School of Economics and Business, Maastricht University.

DIME Final conference, 6-8 April 2011.

• Talk on working paper: "Measuring Industry Relatedness and Corporate Coherence".

# $\star$ London Business School.

Visiting Research Fellow from February 2008 to June 2008.

• Research Topic: microeconomic models with thermodynamic constraints on production functions.

# $\star$ Trinity College Dublin.

 $4^{th}$  INFINITI Conference on International Finance, 12-13 June 2006.

• Talk on working paper: "Electricity prices: a non-parametric approach".

# TEACHING EXPERIENCE

#### \* Scuola Normale Superiore, Pisa

From October 2015 to May 2016, "Calculus for Biologists", course for college students, 30 hours. From February 2016 to May 2016, "Mathematical Finance", PhD in Financial Mathematics, 20 hours.

May 2016, "Computational Finance", PhD in Financial Mathematics, 10 hours.

#### \* Sant'Anna School of Advanced Studies of Pisa.

January 2015, course on "Introduction to stochastic processes", PhD in Economics, 15 hours.

October 2013, tutorials on calculus, course for college student, 10 hours.

March 2013, tutorials on stochastic processes, PhD in Economics, 10 hours.

October 2012, course on "Calculus and tutorials on differential equations", PhD in Economics, 30 hours.

June 2012, tutorials on calculus, course for college students, 10 hours.

December 2011, tutorials on calculus and differential equations, course for college students, 10 hours.

October 2011, course on "Calculus and tutorials on differential equations", PhD in Economics, 30 hours.

May 2011, course on "Management of patent data", course for college students, 10 hours.

March 2011, tutorials on dynamic optimization, PhD in Economics, 10 hours.

March 2011, tutorial on linear algebra, course for college students, 10 hours.

December 2010, tutorials on calculus and differential equations, course for college students, 10 hours.

October 2011, tutorials on calculus and differential equations, PhD in Economics, 20 hours.

October 2010, tutorials on calculus and differential equations, PhD in Economics, 20 hours.

March 2010, tutorials on dynamic optimization, PhD in Economics, 10 hours.

March 2010, tutorial on linear algebra, course for college students, 10 hours.

October 2009, tutorials on calculus and differential equations, PhD in Economics, 20 hours.

TECHNICAL SKILLS Strong experience in shell scripting, GAWK, UNIX based systems, Matlab, Octave, C programming language and management and analysis of large datasets. Basic knowledge of Python.

Languages

Italian (mother tongue). English (good in speaking, writing and reading).

Referee Activity Journal of Financial Econometrics, Journal of Applied Econometrics, Journal of Banking & Finance, PLoSone, Finance Research Letters, Computational Statistics and Data Analysis, Computational Management Science, Quantitative Finance, Journal of Evolutionary Economics.