CV Tiziano De Angelis (November 2020)

Personal details

First Name/Surname: Tiziano De Angelis
Office address: School of Management and Economics, University of Turin, Corso Unione Sovietica, 218 Bis, 10134, Torino (ITALY)
E-mail address:

Education & employment

Nov 2020 - : Associate Professor in Mathematical Analysis, Probability and Statistics, School of Management and Economics, Dept. ESOMAS, University of Turin

Sep 2015 - Oct 2020: Lecturer in Financial/Actuarial Mathematics, School of Mathematics, University of Leeds

Feb 2013 - Aug 2015: EPSRC Post Doctoral Research Associate, School of Mathematics, University of Manchester

Feb 2012 - Jan 2013: Visiting postdoctoral researcher, School of Mathematics, University of Manchester

17 Feb 2012: PhD in *Mathematics for Economic-Financial Applications*, "Sapienza" University of Rome

6 Apr 2009: MSc in *Analysis of Risk-Management for Insurance Companies*, "Sapienza" University of Rome

28 May 2007: MSc in Physics from "Sapienza" University of Rome (cum Laude)

1 Mar 2005: BSc in Physics from "Sapienza" University of Rome (cum Laude)

Professional qualifications

- In July 2018 I obtained the Italian qualification as associate professor in "Mathematical Analysis, Probability and Mathematical Statistics" (Abilitazione Scientifica Nazionale per il settore 01/A3)

Committees

- Since September 2020: External Examiner for the MSc programme in "Mathematics and Finance" at Imperial College London
- Since September 2019: External Examiner for the MSc programme in "Quantitative Finance and Mathematics" at Heriot-Watt University of Edinburgh
- Since January 2019: Committee member of the 'Applied Probability Section' of the Royal Statistical Society

Research Interests.

Optimal stopping, singular stochastic control, free-boundary problems, stochastic games, mathematical finance

Referee Activity.

I am referee for the journals: *Annals of Probability*, *Annals of Applied Probability*, *SIAM Journal on Control and Optimization*, *SIAM Journal on Financial Mathematics*, *Mathematical Finance*, *Mathematics of Operations Research*, *Electronic Journal of Probability*, *Stochastic Processes and Their Applications*, *Journal of Applied Probability*, *Applied Mathematics & Optimization*, *International Journal of Theoretical and Applied Finance*, *Mathematics and Financial Economics* (Springer), *Stochastics*, *Statistics & Probability Letters*, *Mathematical Methods of Operations Research*.

I am also a referee for EPSRC grants, for the Italian PRIN (Research Projects of National Interest) and for the Italian VQR (evaluation of research quality in Italian Universities)

External Funding.

Sep 2019: Awarded funding for 1-month research visit at the University of Sydney (Nov. 2020), funded by University of Sydney via SMRI International Visitor Programme (AUD 7,500)

Feb 2019: (with P. Tankov and O.D.A. Zerbib) Awarded funding on a project with title *Greening companies' practices through optimal environmental investing*, funded by Europlace Institute of Finance (EUR 10,000)

Jan 2018: Awarded EPSRC First Grant EP/R021201/1 (unique PI) on a project with title *A probabilistic toolkit to study regularity of free boundaries in stochastic optimal control* (£125,000).

Oct 2017: (with J. Palczewski) Awarded funding to organise a second research week on *Stochastic control and games under ambiguity*, funded by the Isaac Newton Institute (£5,000)

Jan 2017: (with J. Palczewski) Awarded funding to organise a research week on *Stopping games with ambiguity-averse players*, funded by the Heilbronn Institute for Mathematical Research (£7,000)

Nov 2016: Awarded funding for 1-month visit at LUISS Guido Carli, Univ. of Rome (EUR 2,500)

2015/16: Co-I in the research projects:
Stochastic continuous time models for pension planning, Progetto di Ateneo C26A14HXBR, Sapienza Univ. of Rome (EUR$3,500$)
Tax evasion, corruption and inequality: quantitative models, empirical evidence and corrective policies, Progetto di Ateneo C26H159TJS, Sapienza Univ. of Rome (EUR20,000)

May 2013: Awarded funding for 1-month visit at Hausdorff Research Institute for Mathematics (HIM), University of Bonn (EUR 2,400)

Feb 2012: *Borsa di perfezionamento all'estero* (grant for a 12-month research project in a non-Italian institution), granted by Department of Mathematics, "Sapienza" University of Rome on competitive basis (EUR$15,480$)

Other Funding.

Jan 2018: (with J. Palczewski) Awarded funding to organise a second conference on *Stochastic Control, Ambiguity and Games*, funded by School of Mathematics, University of Leeds (£6,675)

Mar 2017: (with J. Palczewski) Awarded funding to organise the conference *Stochastic Control, Ambiguity and Games*, funded by School of Mathematics, University of Leeds (£4,500)

Jun 2016: (with A. Veretennikov) Awarded funding to organise the conference *Stochastic Analysis of Dynamical Systems, Stochastic Control and Games*, funded by School of Mathematics, University of Leeds ($£6,000$)

Plenary talks

June 2018: A Symposium on Optimal Stopping, Rice University, Houston, TX (US)

May 2018: Byrne Workshop on Stochastic Analysis in Finance and Insurance, University of Michigan, Ann Arbor (US)

Invited talks to conferences

July 2020: *Conference* – SIAM Annual Meeting 2020, Toronto (minisymposium: Stochastic Games), invited by M. Ludkovski (Univ. of California) and R. Sircar (Princeton)

July 2020: *Conference* – Advances in stochastic control and optimal stopping with applications in Economics and Finance, CIRM Luminy (Marseilles, France) - *Fully funded*

July 2019: *Workshop* – Equilibria in Markets, Strategic Interactions, and Complex Systems, ZiF Centre, Bielefeld - *Fully funded*

July 2019: *Conference* – International Congress on Industrial and Applied Mathematics, University of Valencia (minisymposium: Stochastic Differential Equations and Applications in Physics and Finance)

Dec 2017: *Workshop* – Optimal stopping in complex environments, IMW University of Bielefeld, Germany

Sep 2017: *Conference* – SIAM-LMS conference on Mathematical Modelling in Finance, Imperial College, London - *Fully funded*

July 2017: Inaugural Conference of the Centre for Mathemtical Research in Economics and Finance, University of Manchester - *Fully funded*

March 2016: *Workshop* – Skorokhod embeddings, martingale optimal transport and applications, University of Oxford - *Fully funded*

Jul 2015: *Workshop* – Strategic Aspects of Optimal Stopping and Control in Economics and Finance, University of Bielefeld, Germany - *Fully funded*

May 2015: *Workshop* – 13th Viennese workshop on Optimal Control and Dynamic Games, TU Vienna (special session Optimal Control in Finite and Infinite Dimensions and Application to Economics)

May 2014: *Conference* – SIAM Optimization 2014, San Diego – minisymposium Stochastic Optimal Control and Applications

Selected invited talks to seminar series

Dec 2020: University Carlos III of Madrid

Oct 2020: FiME seminar series at Institut Henri Poincaré (Paris)

Jan 2020: Scuola Normale Superiore di Pisa seminar series: "Probability and Quantitative Finance"

Dec 2019: Toulouse School of Econonmics

Nov 2019: Berlin research seminar series: "Stochastic Analysis and Stochastics of Financial Markets"

Oct 2019: Queen Mary university of London

May 2019: University of Bologna

Apr 2019: University of Turin

Nov 2018: ENSAE ParisTech, Paris

Nov 2018: Department of Statistics, London School of Economics

Oct 2018: School of Mathematics, University of York

Oct 2018: Department to Statistics, University of Warwick

Dec 2017: Department of Mathematics, Queen Mary University of London

March 2017: Department of Mathematics, King's College, London

Nov 2016: Department of Statistics, University of Warwick

Feb 2013: Department of Mathematical Sciences, University of Bath

Oct 2012: (CAKE talks) Centre for Mathematical Sciences (CMS) of Cambridge

May 2012: Friedrich-Schiller University of Jena, Department of Mathematics and Computer Science

Nov 2011: University of Vienna, Department of Mathematics

Selected contributed talks

Sep 2018: *Workshop* – BSDEs, Information and McVlasov Equations, University of Leeds

March 2017: *Workshop* – Stochastic Models and Control, University of Trier

Jul 2015: *Conference* – 38th Conference on Stochastic Processes and Their Applications, University of Oxford

May 2015: *Workshop* – Optimal Stopping and Applications, University of Torino

March 2015: *Workshop* – Stochastic Analysis, Controlled Dynamical Systems and Applications, University of Jena

Sep 2014: *Conference* – Stochastics of Environmental and Financial Economics, Oslo

Jun 2013: 6th AMaMeF and Banach Center Conference - Advances in Mathematics of Finance, Warsaw

Aug 2012: 5th European Summer School in Financial Mathematics, Ecóle Polytechnique-Paris

Academic visits.

March 2020: Visit to University of Paris Diderót (1 week fully funded), invited by R. Aïd.

Jan 2020: Visit to Scuola Normale Superiore di Pisa (1 week), invited by G. Livieri and M. Ghio.

Dec 2020: Visit to Toulouse School of Economics (1 week funded by EPSRC EP/R021201/1), invited by S. Villeneuve

Nov 2019: Visit to ENSAE ParisTech (1 week funded by EPSRC EP/R021201/1), invited by P. Tankov.

Oct 2019: Visit to Queen Mary University of London and London School of Economics (1 week funded by EPSRC EP/R021201/1), invited by N. Rodosthenous and L. Campi.

Sep 2019: Visit to University of Uppsala (1 week funded by EPSRC EP/R021201/1), invited by E. Ekström.

Jul 2019: Visit to ENSAE ParisTech (1 week funded by EPSRC EP/R021201/1), invited by P. Tankov.

May 2019: Visit to University of Bath (1 week funded by EPSRC EP/R021201/1), invited by A. Cox.

Jan 2019: Visit to Isaac Newton Institute (2 weeks partly funded) for the programme *Mathematics of Energy Systems*.

Dec 2018: Visit to University of Uppsala (1 week partly funded by EPSRC EP/R021201/1), invited by E. Ekström.

Nov 2018: Visit to ENSAE ParisTech (1 week fully funded), invited by P. Tankov.

Oct 2018: Visit to University of Bath (1 week funded by EPSRC EP/R021201/1), invited by A. Cox.

May 2018: Visit to ETH Zurich (1 week funded by EPSRC EP/R021201/1), invited by M. Soner.

March 2018: Visit to University of Uppsala (1 week fully funded), invited by E. Ekström.

Nov 2017: Visit to Rice University, Houston, TX (2 weeks fully funded) invited by P. Ernst.

Nov 2016: Visiting Professor (1 month fully funded) at LUISS University of Rome, Italy, invited by F. Gozzi.

Sep 2016: Visit to University of Bielefeld (1 week fully funded), invited by G. Ferrari.

July 2016: Visit to University of Le Mans (2 weeks fully funded), invited by S. Hamadene.

June 2016: Visit to University of Uppsala (1 week fully funded), invited by E. Ekström.

Sep 2015: Visit to Toulouse School of Economics (2 weeks fully funded), invited by C. Grün.

May 2013: Visit to Hausdorff Research Institute for Mathematics (HIM), University of Bonn in the framework of the Trimester Program "Stochastic Dynamics in Economics and Finance" (1 month fully funded).

Organization of scientific meetings

Sep 2020: *Conference*: Mathematics and economics of climate risk, Collége de France, Paris (with J.-F. Chassagneux, P. Tankov and O.D. Zerbib)

July 2020: Member of the organising committee of the 162nd European Study Group with Industry, University of Leeds

Jan 2020: 1-week winter school on *Theory and Practice of Optimal Stopping and Free Boundary Problems*, School of Mathematics, University of Leeds

Nov 2019: 2nd Leeds-Liverpool workshop on Applied Probability (1-day), School of Mathematics, University of Leeds

Apr 2019: (with J. Palczewski) Second conference + research week on *Stochastic Control and Games under Ambiguity*, School of Mathematics, University of Leeds (funding in place as described in the 'funding & awards' entry above)

Jul 2018: (with G. Ferrari & S. Federico) Organiser of two sessions on *Optimal stopping, singular and impulse control and their applications* at the 14th Viennese Conference on Optimal Control and Dynamic Games

Sep 2017: (with J. Palczewski) conference *Stochastic Control, Ambiguity and Games* + Research Week on *Stopping Games for Ambiguity-Averse Players*, School of Mathematics, University of Leeds

Apr 2017: (with M. López-Garcia) Probability in the North-East (1 day) conference *Interdisciplinary aspects of stochastic processes: health & disease and finance*

Oct 2016: (with A. Veretennikov) conference *Stochastic Analysis of Dynamical Systems, Stochastic Control and Games*, School of Mathematics, University or Leeds (60 participants)

Feb 2013: (with M.B. Chiarolla, G. Ferrari, G. Stabile) workshop on *Free-boundary Problems, Optimal Stopping and the Commodity Market*, "Sapienza" University or Rome

PhD Students

2020 – ongoing: J. Smith (lead supervisor). *Project*: Optimal stopping models for economics and finance

2019 – ongoing: A. Bovo (lead supervisor). *Project*: PDE methods for controller/stopper games

2018 – ongoing: External PhD supervisor of A. Milazzo (Imperial College). *Project*: Stochastic control with discretionary stopping

2017 – ongoing: C. Cai (lead supervisor). *Project*: Constrained optimal hedging problems in finance

2017 – ongoing: N. Merkulov (co-supervisor). *Project*: Equilibria in Dynkin (stopping) games

2016 – 2020: J. Anquandah (lead supervisor). *Project*: Stochastic models for unemployment insurance

PhD Examiner Role

Jan. 2020: External examiner PhD thesis M. Brachetta (PhD from University of Chieti-Pescara)

Oct. 2019: External examiner PhD thesis Q. Zeng (PhD from University of Warwick)

April 2019: External examiner PhD thesis of A. Tiplea (PhD from the University of Sidney)

June 2018: Internal examiner PhD thesis of Z. He (PhD from the University of Leeds)

Teaching

Since Sept. 2015 module leader for Financial Mathematics I (MATH1510; 300+ students per year), tutorial assistant for Financial Mathematics II & III (MATH2530, MATH2540), supervisor of six 3rd-year project each year; (2016-2018) module leader dissertations MSc in Financial Mathematics (my role included coordinating work of 8-10 academic supervisors each year); supervisor of 12 MSc dissertations; I designed the (level 5) level 3 module(s) (Advanced) Stochastic Calculus for Finance (MATH3734 and MATH5734); (2015-2017) supervisor of 6 Year-in-Industry projects (students on 1-year industrial placement).

Further PG and PGR supervision.

Sep 2019: Co-supervisor of MSc Thesis of V. Pieropan (MSc student at University of Trento)

May 2019: Co-supervisor of 12-week MSc research-project of C. Michon (MSc student at ENSTA Paris-Tech)

May 2018: Co-supervisor of 12-week MSc research-project of M. Germain (MSc student at ENSTA Paris-Tech)

Oct 2017: Supervisor of MSc dissertation in Mathematics of F. Capellini, from University "Statale" of Milano

May 2016: Supervisor of 12-week MSc research-project of I. El Hanafi (MSc student at ENSTA Paris-Tech)

May 2015: Supervisor of 12-week MSc research-project of D. Louvet (MSc student at ENSTA Paris-Tech)

May 2014: Supervisor of 12-week MSc research-project of G. Baccari (MSc student at ENSTA Paris-Tech)

Personal Development.

May 2018: Leeds Academic Development (Online) - "Role of the Internal Examiner"

Apr 2017: Leeds SDDU Training - "Rectruiting and supervising PGRs"

Sept 2016: HEA training - "New to teaching in STEM: Maths, Stats, Operational Res.", University of Greenwich

Jan 2016: Leeds SDDU Training - "Lecturing for researched based learning"

2014-2015: Organisation of the *Career Development Forum*'s meetings in the School of Mathematics of the University of Manchester

Personal Interests.

I have studied music and played electric bass since 1997. I practiced waterpolo at level of competitions from 1993 to 2010. I am an amateur martial artist and squash player.