# Francesco Mattiello

Curriculum Vitae

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#### **Research** interests

Homological algebra in triangulated categories, Torsion pairs and tilting theory, Stability conditions in abelian and triangulated categories, Category theory.

#### Education

Since May 2015	Postdoctoral researcher in Mathematics	
	University of Padova (Italy)	
March 2015	PhD in Mathematics - University of Padova	
Jan. 2012 - Jan. 2015	PhD candidate	
	University of Padova (Italy)	
	Advisor: Prof. Riccardo Colpi	
July 2011	Master degree in Mathematics - 110/110 cum laude	
	Joint degree: University of Padova (Italy), University of Bordeaux (France)	
	Master Thesis: On the heart associated to a faithful torsion pair	
	Thesis Advisors: Prof. Riccardo Colpi, Prof. Boas Erez	
Sept. 2010 - July 2011	Second year Master Mundus ALGANT	
	University of Bordeaux (France)	
Sept. 2009 - July 2010	First year Master Mundus ALGANT	
	University of Padova (Italy)	
July 2009	Bachelor degree in Mathematics - 110/110 cum laude	
	University of Padova (Italy)	
	Bachelor Thesis: Quotients of the gaussian integers	
	Thesis Advisors: Prof. Federico Menegazzo	
Oct. 2005 - July 2009	Bachelor studies in Mathematics	
	University of Padova (Italy)	

# Publications and preprints

2016	F. Mattiello, On a property of t-structures generated by non-classical tilting mod-
	<i>ules</i> (preprint).
2016	L. Fiorot, F. Mattiello, M. Saorín, Derived equivalences induced by nonclassical
	tilting objects (accepted for publication in Proceedings of the America Mathemat-
	<i>ical Society</i> ).
2016	L. Fiorot, F. Mattiello, A. Tonolo, A classification theorem for t-structures (ac-
	cepted for publication in <i>Journal of Algebra</i> ).
2016	R. Colpi, L. Fiorot, F. Mattiello, On Tilted Giraud Subcategories, Journal of
	Pure and Applied Algebra Volume 220, Issue 1, January 2016, Pages 346363,
	doi:10.1016/j.jpaa.2015.06.016.

## Research visits

# Various papers

2015	F. Mattiello, New trends in tilting theory (PhD Thesis)
2011	F. Mattiello, On the heart associated to a faithful torsion pair (Master Thesis)

# Talks

Nov Dec. 2014	The 2-category of Grothendieck Derivators		
	University of Padova (Italy), Seminar on Grothendieck Derivators		
June 2014	Some aspects of tilting		
	Abbazia di Spineto (Italy), Algebraic Structures and Their Applications		
February 2014	The Ziegler Spectrum of a ring		
	University of Verona (Italy), Seminar on Some Aspects of Purity		
December 2013	Stability conditions		
	University of Padova (Italy), Seminar on Stability conditions		
November 2013	Torsion theories and t-structures		
	University of Padova (Italy), Seminar on Stability conditions		
October 2013	Pure exact sequences, Pure-projective and Pure-injective modules		
	University of Verona (Italy), Seminar on Some Aspects of Purity		
June 2013	Torsion pairs trough Giraud and co-Giraud subcategories with applications to		
	hearts of t-structures		
	University of Murcia (Spain), Recent Trends in Rings and Algebras		
Feb. 2012	The AR-quiver of a tilted algebra		
	University of Verona (Italy), Representation Theory Seminar		
July 2011	On the heart associated to a faithful torsion pair		
	University of Milan (Italy), Graduation		
June 2011	On the heart associated to a faithful torsion pair		
	University of Bordeaux (France), Graduation		
Mach 2011	Derived categories and t-structures		
	University of Bordeaux (France), Groupe de travail Géométrie Algébrique et		
	Géométrie Arithmétique		
April 2010	An introduction to the Riemann zeta function		
	University of Padova (Italy), Undergraduate student seminar		
April 2008	An elementary view of Euler's summation formula		
	University of Padova (Italy), Undergraduate student seminar		

## Conferences, Seminars, Workshops

April 2015	Axiomatic Homotopy Theory via Grothendieck Derivators
	CRM - Universitat Autnoma de Barcelona (Spain)
June 2014	Algebraic Structures and Their Applications
	Abbazia di Spineto (Italy)
June 2013	Recent Trends in Rings and Algebras
	University of Murcia (Spain)
Jan Sept. 2013	MALGA Seminars
_	University of Padova (Italy)
Jan Dec. 2012	MALGA Seminars
	University of Padova (Italy)
April 2012	Maurice Auslander International Conference and Distinguished Lectures
_	Northeastern University (USA)
Sept. 2011	Cohomology theories: a road map. ALGANT Summer School
	University of Padova, Bressanone (Italy)
March - April 2011	MALGA Seminars
	University of Padova (Italy)
2010-2011	Groupe de travail Géométrie Algébrique et Géométrie Arithmétique
	University of Bordeaux (France)
Nov. 2010	Séminaire Bourbaki
	École normale supérieure (France)
Nov. 2010	Espace-temps, nombres premiers, deux défis pour la géométrie. Une question, un
	chercheur
	Institut Henri Pincaré (France)
July 2010	Elliptic curves. ALGANT Summer School
-	University of Bordeaux (France)

#### Referee work

2012	Note di Matematica
2015	Journal of Algebra and Its Applications

## Awards and Fellowships

2012 - 2015	PhD Scholarship funded by the University of Padova
2009 - 2011	European Commission Erasmus Mundus grant

#### Teaching experience

#### Teaching for the following courses:

2016 - 2017	Analisi Matematica e Geometria (IUAV, Venezia)
2016 - 2017	Precorso di Matematica (Padova)
2015 - 2016	Precorso di Matematica (Padova)

## Teaching assistant for the following courses:

2016 - 2017Algebra 2 (Padova)2015 - 2016Algebra 1 (Padova)2014 - 2015Algebra 1 (Padova)2013 - 2014Algebra 1 (Padova)2012 - 2013Matematica e Statistica (Padova)2011 - 2012Matematica e Statistica (Padova)	2016 - 2017	Algebra (Verona)
2015 - 2016Algebra 1 (Padova)2014 - 2015Algebra 1 (Padova)2013 - 2014Algebra 1 (Padova)2012 - 2013Matematica e Statistica (Padova)2011 - 2012Matematica e Statistica (Padova)	2016 - 2017	Algebra 2 (Padova)
2014 - 2015Algebra 1 (Padova)2013 - 2014Algebra 1 (Padova)2012 - 2013Matematica e Statistica (Padova)2011 - 2012Matematica e Statistica (Padova)	2015 - 2016	Algebra 1 (Padova)
2013 - 2014Algebra 1 (Padova)2012 - 2013Matematica e Statistica (Padova)2011 - 2012Matematica e Statistica (Padova)	2014 - 2015	Algebra 1 (Padova)
2012 - 2013Matematica e Statistica (Padova)2011 - 2012Matematica e Statistica (Padova)	2013 - 2014	Algebra 1 (Padova)
2011 - 2012 Matematica e Statistica (Padova)	2012 - 2013	Matematica e Statistica (Padova)
	2011 - 2012	Matematica e Statistica (Padova)

# Organizing activities

May 2015 - Sept. 2015	MOOC Precorso di Calcolo (with M. Fogagnolo, V. Franceschi, C. Mariconda, L.
	Provenzano, A. Tonolo)
Nov. 2014 - Jan. 2015	Seminar on Grothendieck Derivators (with S. Bazzoni and S. Virili)
Sept. 2013 - June 2014	Conference Algebraic Structures and Their Applications (with S. Bazzoni, R.
	Colpi, F. Mantese, A. Pavarin, A. Tonolo)
Nov. 2013 - Jan. 2014	Seminar on Stability Conditionst (with E. Mistretta and S. Urbinati)
Oct. 2013 - Feb. 2014	Seminar on Some Aspects of Purity (with A. Pavarin and J. Vitoria)
Dec. 2012 - Mar. 2013	Working group on Model Categories and Applications (with R. Colpi)

## Languages

Italian	Native speaker
English	Fluent
French	Fluent