Federico BINDA

PERSONAL DATA

PLACE AND DATE OF BIRTH:	Busto Arsizio, Italy | 13 Nov 1988
ADDRESS:	Dipartimento di Matematica "Federigo Enriques", Università degli Studi di Milano Via Cesare Saldini 50, 20133 Milano (IT)
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WORK EXPERIENCE

Current JUNE 2019	Assistant Professor NTT (Ricercatore Tempo Determinato A), UNIVERSITÀ DEGLI STUDI DI MILANO, Italy *MAT 02/ Algebra*
OCT. 2016- MAY 2019	Postdoctoral researcher at the UNIVERSITY OF REGENSBURG, Germany *SFB 1085 Higher Invariants* Arbeitsgruppe Prof. Dr. Motitz Kerz.
SEPT. 2015- SEPT. 2016	Wissenschaftlicher Mitarbeiter at the UNIVERSITY OF DUISBURG-ESSEN, Germany *DFG SPP 1786 "Homotopy theory and algebraic geometry".* Arbeitsgruppe Prof. Dr. Marc Levine.
NOV. 2012 - SEPT. 2015	Promotionsstipendium (Ph.D. scholarship) at the UNIVERSITY OF DUISBURG-ESSEN, Germany. Arbeitsgruppe Prof. Dr. Marc Levine.

EDUCATION

AUGUST 2016	Dr. Rer. Nat. (Ph.D.) in MATHEMATICS, **University of Duisburg-Essen**, Essen Summa cum laude (*mit Auszeichnung*). Thesis: "Motives and algebraic cycles with moduli conditions" Advisor: Prof. Dr. Marc N. LEVINE
JULY 2012	M2R - Mathématiques Fondamentales et Appliquées (Master in pure Mathematics) **École Normale Supérieure, École Polytechnique, Université Paris-Sud**, Paris Advisor: Prof. Ahmed ABBES (CNRS - IHES)
JULY 2012	Master of science in PURE MATHEMATICS, **University of Milan**, Milan 110/110 *cum laude.* Thesis: "Hodge-Tate decomposition theorem for Abelian Varieties over p-adic fields" Advisor: Prof. Ahmed ABBES (CNRS - IHES)
JULY 2010	Undergraduate degree in PURE MATHEMATICS, **University of Milan**, Milan 110/110 *cum laude.* Thesis topic: "Units in quadratic number fields" | Advisor: Prof. Massimo BERTOLINI

PUBLICATIONS AND PREPRINTS

1. **Torsion and divisibility for reciprocity sheaves and 0-cycles with modulus**. (with Jin

Cao, Wataru Kai and Rin Sugiyama) *J. of Algebra,* Volume 469, 1 January 2017, Pages 437–463. Published version.

2. **Algebraic cycles with moduli and regulator maps** (with Shuji Saito). Accepted for publication in *J. of the Inst. of Math. Jussieu.* 2018. First View.

3. **Zero cycles with modulus and zero cycles on singular varieties.** (with Amalendu Krishna) *Compositio Math.,* Volume 154, 1, January 2018, Pages 120-187. Published version.

4. **Torsion zero cycles with modulus on affine varieties.** *J. of Pure and App. Algebra,* Volume 222, Issue 1, January 2018, Pages 61-74. Published version.

5. **A cycle class map for zero cycles with modulus to higher relative K-groups.** Accepted for publication in *Documenta Math.* 2018. Online version.

6. **A Motivic homotopy theory without $\mathbb{A}^1$-invariance.** Preprint (2017). Submitted. Online version.

7. **Rigidity for relative 0-cycles** (with Amalendu Krishna). arXiv:1802.00165 [mathAG]. Submitted (2018). Online version.

8. **Semi-purity for cycles with modulus** (with Shuji Saito). arXiv:1812.01878 [mathAG]. (2018). Online version.

9. **On Laumon 1-motives and motives with modulus** (with Shuji Saito). In preparation. Draft available on request.

10. **Levine-Weibel Chow group and motivic cohomology of singular varieties** (with Amalendu Krishna). In preparation. Draft available on request.

11. **Rigidity for relative 0-cycles II. The quasi-projective case** (with Amalendu Krishna). In preparation.

12. **On the Levine-Weibel Chow group of product of curves** (with Wataru Kai and Takao Yamazaki). In preparation.

Thesis **Motives and algebraic cycles with moduli conditions.**
Ph.D. thesis, University of Duisburg-Essen (2016).
DuEPublico ID: 41950. Online version.

Scholarships and prizes

Nov. 2012 - Sept. 2015	Promotionsstipendium (graduate student scholarship). **University of Duisburg-Essen.**
Sept. 2011	**Cariplo foundation** scholarship for excellent master students (€10,000)
2010 and 2011	ALGANT Excellence Scholarship programme (ALExS).
2007 -2010	Undergraduate award (tuition waiver based on grades and credits). **University of Milan.**

Research visits (at least 2 weeks)

Mar. - Apr. 2019	**Oslo University**, Norway | Host: P.-A. Østvær
Jan. - Feb. 2019	**Tata Institute of Fundamental Research**, India | Host: A. Krishna.
Apr. 2018	**Tohoku University**, Japan | Host: T. Yamazaki
Mar. 2018	**Oslo University**, Norway | Host: P.-A. Østvær
Jan. - Mar. 2018	**Tata Institute of Fundamental Research**, India | Host: A. Krishna.
Jun. - Aug. 2017	**Hausdorff Research Institute for Mathematics**, Germany K-theory and related fields - Hausdorff trimester program.
Mar. - Apr. 2017	**Institut Mittag-Leffler**, Sweden Algebro-Geometric and Homotopical Methods - trimester program.
Feb. 2017	**Tohoku University**, Japan | Host: T. Yamazaki
Nov. - Dec. 2016	**Tata Institute of Fundamental Research**, India | Host: A. Krishna.
Sept. 2015	**Tata Institute of Fundamental Research**, India | Host: A. Krishna.
Aug. - Sept. 2014	**Tata Institute of Fundamental Research**, India | Host: A. Krishna.
Mar. 2013	**University of Milan**, Italy | Host: L. Barbieri-Viale

Administrative duties

May 2018	Organization of the workshop *Motivic homotopy theory and refined enumerative geometry* University of Duisburg Essen. Sponsor: DFG SPP 1786 "Homotopy Theory and Algebraic Geometry". Conference website.

Selection of seminars and talks

Feb. 2019 *Semi-purity for cycles with modulus*
Workshop "Motives in Tokyo", University of Tokyo

Sept. 2018 *Specialization theorems for cycles of relative dimension zero*
Motives in St. Petersburg 2018, Euler International Mathematical Institute, St. Petersburg

Apr. 2018 *Specialization theorems for cycles of relative dimension zero*
Algebraic geometry seminar, Tohoku University, Sendai

Mar. 2018 *Rigidity for relative 0-cycles*
Conference "Motives in Tokyo, on the occasion of Shuji Saito's 60th Birthday", University of Tokyo

Mar. 2018 *Rigidity for relative 0-cycles*
Geometry and topology seminar, Oslo University

Feb. 2018 *Rigidity for relative 0-cycles*
Conference "K-theory, $\mathbb{A}^1$-homotopy and quadratic forms", University of Warwick, Coventry (UK)

Feb. 2018 *Laumon 1-motives and motives with modulus*
Geometry seminar, Tata Institute of Fundamental Research, Mumbai

Nov. 2017 *Motivic cohomology of normal crossing varieties and restriction of zero cycles*
Algebraic geometry and topology seminar, Universität Osnabrück, Osnabrück

June 2017 *Towards a motivic (homotopy) theory without $\mathbb{A}^1$-invariance*
Workshop "K-theory and related fields", Hausdorff Research Institute for Mathematics, Bonn

Apr. 2017 *Towards a motivic (homotopy) theory without $\mathbb{A}^1$-invariance*
Algebro-Geometric and Homotopical Methods - trimester program, Institut Mittag-Leffler, Djursholm

Feb. 2017 *Towards a non-$\mathbb{A}^1$-invariant motivic theory*
Algebraic geometry seminar, Tohoku University, Sendai

Feb. 2017 *Zero cycles with modulus and zero cycles on singular varieties*
Workshop "Motives in Tokyo", University of Tokyo.

Dec. 2016 *Cycles with modulus and non $\mathbb{A}^1$-invariant motives,*
Workshop "Around motives", University of Milan (Italy).

June 2016 *On motives with moduli conditions,*
Workshop "Homotopical approaches to categories and geometry", Freiburg.

Apr. 2016 *Zero cycles with modulus and zero cycles on singular varieties*
Workshop "Generalizations of $\mathbb{A}^1$-Homotopy Invariance in Algebraic Geometry and Homotopy Theory"
Freie Universität Berlin. Zinnowitz-Usedom

Jan. 2016 *Cycles with modulus, regulators and applications,*
Algebraic geometry seminar, Université Grenoble-Alpes, Grenoble

Oct. 2014 *Algebraic Cycles with modulus and Applications,*
Conference for Young Researchers in Arithmetic and Algebraic Geometry, University of Bonn

Sept. 2011 *Model categories, a tour de force,*
Summer School "Cohomology theories: a roadmap", Brixen.

Selection of conferences and advances courses

FEB. 2019	*International workshop on Motives in Tokyo*
	University of Tokyo, Tokyo, Japan
SEP. 2018	Conference *Motives in St. Petersburg*
	Euler International Mathematical Institute, St. Petersburg, Russia
APR. 2018	Conference *Motives in Tokyo, on the occasion of Shuji Saito's 60th Birthday*
	University of Tokyo, Tokyo, Japan
FEB. 2018	Conference *K-theory, $\mathbb{A}^1$-homotopy and quadratic forms*
	University of Warwick, Conventry, UK
SEPT. 2017	Workshop: *Topological cyclic homology and p-adic Hodge theory*
	University of Tokyo and Tokyo Institute of Technology, Haramura, Japan
JUNE 2017	Workshop: *K-theory and related fields*
	Hausdorff Research Institute for Mathematics, Bonn, Germany
FEB. 2017	*International workshop on Motives in Tokyo*
	University of Tokyo, Tokyo, Japan
SEPT. 2016	Conference *Differential forms in algebraic geometry*
	University of Freiburg. Freiburg, Germany.
JULY 2016	*Algebraic K-theory and motivic cohomology*
	Mathematische Forschungsinstitut Oberwolfach, Oberwolfach, Germany
JUN. 2016	Workshop *Homotopical approaches to categories and geometry*
	University of Freiburg. Freiburg, Germany.
APR. 2016	*Generalizations of $\mathbb{A}^1$-Homotopy Invariance in Algebraic Geometry and Homotopy Theory*
	Freie Universität Berlin. Zinnowitz-Usedom
AUG. 2015	Summer school *Algebraic K-theory and trace methods*
	University of Regensburg, Regensburg, Germany.
JULY 2015	*AMS Summer Institute (Algebraic Geometry)*
	University of Utah, Salt Lake City, USA.
MAR. 2015	School *"p-adic arithmetic"*
	University of Duisburg-Essen, Essen, Germany.
NOV. 2014	*International Workshop on motives in Tokyo*
	University of Tokyo, Tokyo, Japan
OCT. 2014	*Conference for Young Researchers in Arithmetic and Algebraic Geometry*
	University of Bonn, Bonn, Germany
OCT. 2014	Summer school *Continuous K-theory of p-adic rings*
	Kleinwalsertal, Austria
NOV. 2013	*International Workshop on motives in Tokyo*
	University of Tokyo, Tokyo, Japan
SEPT. 2013	Summer school *Motivic Galois group*
	Alfréd Rényi Institute of Mathematics. Budapest, Hungary
JULY 2013	Conference *Arithmetic Geometry*
	Banach conference center, Warsaw, Poland
SEPT. 2011	Summer school *Cohomology theories: a roadmap*
	University of Padova, Brixen, Italy
JULY 2011	Summer school *The Birch and Swinnerton-Dyer conjecture*
	Alghero, Italy.

Languages

ITALIAN:	Mothertongue
ENGLISH:	Fluent
FRENCH:	Fluent
GERMAN:	Basic Knowledge