

Dr. Marco Ramponi – Curriculum Vitae

Contact

Address TU Berlin, Institut für Mathematik
Sekretariat MA 3-2
Strasse des 17. Juni 136
10623 Berlin

Email ramponi [(a-t)] math.tu-berlin.de

Website marcoramponi.github.io

Current position

Postdoctoral Researcher (2020–)
TECHNISCHE UNIVERSITÄT BERLIN
Institut für Mathematik
Mentor: Prof. Dr. Peter Bürgisser

Past positions

Postdoctoral fellowship Einstein Foundation (2019-2020)
FREIE UNIVERSITÄT BERLIN & HUMBOLDT-UNIVERSITÄT ZU BERLIN
Institut für Mathematik
Mentor: Prof. Dr. Gavril Farkas

Postdoctoral Researcher (2018–2019)
UNIVERSITÄT AUGSBURG
Institut für Mathematik
Mentor: Prof. Dr. Marc Nieper-Wißkirchen

Postdoctoral fellowship Einstein Foundation (2017-2018)
HUMBOLDT-UNIVERSITÄT ZU BERLIN
Institut für Mathematik
Mentor: Prof. Dr. Gavril Farkas

Phd scholarship – French government (2014–2017)
UNIVERSITÉ DE POITIERS
Laboratoire de Mathématiques et Applications
Advisor: Prof. Dr. Alessandra Sarti

Degrees

Ph.D. Mathematics (2017)
UNIVERSITÉ DE POITIERS
Defended on December 20, 2017.
Ph.D. advisor: Prof. Dr. Alessandra Sarti

MSc. Mathematics (2014)
UNIVERSITÀ DEGLI STUDI DI MILANO

Obtained on April 8, 2014. Final mark: 110/110 cum laude¹
Thesis advisors: Prof. Dr. Alessandra Sarti & Prof. Dr. Paolo Stellari

BSc. Mathematics (2012)
UNIVERSITÀ DEGLI STUDI DI MILANO
Obtained on February 27, 2012.

Research interests

Algebraic geometry: Brill-Noether theory and its applications to the study of the geometry of moduli spaces of curves and surfaces, with special emphasis for K3 and abelian surfaces; vector bundles on algebraic varieties and stability problems; Gauss-Wahl maps on varieties.

Publications and preprints

D. Agostini, M. Ramponi, *Syzygies of Kummer surfaces and Koszul divisors on the moduli space of abelian surfaces*, (in preparation)

M. Ramponi, *A note on Nikulin surfaces and their moduli spaces*, *Mathematische Zeitschrift* (2019), to appear (doi:10.1007/s00209-019-02367-w)

M. Ramponi, *Special divisors on curves on K3 surfaces carrying an Enriques involution*, *Manuscripta Mathematica* (2017) 153(1), 315-322

M. Ramponi, *Gonality and Clifford index of curves on elliptic K3 surfaces with Picard number two*, *Archiv der Mathematik* (2016), 106(4), 355-362

Scientific visits

Humboldt-Universität zu Berlin
May 2017, Berlin, Germany

Università degli Studi di Roma Tor Vergata
March-May 2017, Rome, Italy

Università degli Studi di Roma Tor Vergata
January 2015, Rome, Italy

Invited talks at conferences

YPAG 2019
University of Bayreuth
April 3–5, 2019, Bayreuth, Germany
“On Nikulin K3 surfaces and their moduli”

GAGC 2017 (short talks session)
Rencontre GAGC 2017 at CIRM
December 11–15, 2017, CIRM, Luminy, France

¹In the Italian grading system, 110/110 is the maximum grade. For outstanding results, “cum laude” is added to the maximum grade.

“On the geometry of Nikulin K3 surfaces”

Workshop of Algebraic Geometry

Università degli Studi di Milano, December 21-22, 2015, Milan, Italy

“Brill-Noether theory of curves on special elliptic K3 surfaces”

Invited talks at research seminars

Freie-Universität Berlin

Math+ Thematic semester seminar on algebraic geometry

December 6, 2019, Berlin, Germany

“Brill-Noether theory and moduli spaces of abelian and K3 surfaces”

Philipps-Universität Marburg

Arbeitsgruppe algebraische und komplexe Geometrie

July 11, 2017, Marburg, Germany

“K3 surfaces and special divisors on algebraic curves”

Université de Poitiers

Séminaire de groupes, algèbre et géométrie

June 15, 2017, Poitiers, France

“Surfaces K3 et théorie de Brill-Noether”

Humboldt-Universität zu Berlin

Forschungsseminar Algebraische Geometrie

May 24, 2017, Berlin, Germany

“Curves on K3 double covers of Enriques surfaces”

Università degli Studi di Roma Tor Vergata

Seminar of Algebraic Geometry

April 18, 2017, Rome, Italy

“Curves on K3 double covers of Enriques surfaces”

Université de Poitiers

Groupe de travail

September 2016, Poitiers, France

“Positivité en géométrie algébrique”

University of Augsburg

Oberseminar zur Algebra und Zahlentheorie

June 29, 2016, Augsburg, Germany

“K3 surfaces and special divisors on algebraic curves”

Université de Poitiers

Groupe de travail

January 2016, Poitiers, France

“Fibrés de Lazarsfeld-Mukai et applications”

Université de Poitiers

Groupe de travail

October 2015, Poitiers, France

“K3 surfaces, automorphisms and the Clifford index”

Università degli Studi di Roma Tor Vergata

Seminar of Algebraic Geometry

January 26, 2015, Rome, Italy

“K3 surfaces, automorphisms and Brill-Noether theory”

Université de Poitiers

Groupe de travail

February 2014, Poitiers, France

“Curves on 2-elementary K3 surfaces (after K. Watanabe)”

Invited lectures

Università degli Studi Roma Tre

Seminar for the Phd course “Selected topics on K3 surfaces” (by F. Viviani)

May 4, 2017, Rome, Italy

“On the Brill-Noether theorem via K3 surfaces”

Palazzone di Cortona

Pre-course at SMI Cortona summer school

August, 2015, Cortona, Italy

“A crash course on K3 surfaces and the Torelli theorem”

Dissemination of scientific knowledge

Université de Poitiers

Cérémonie de remise de diplômes

December 14, 2018, Poitiers, France

“L’espace des surfaces K3”

Grants, awards and distinctions

Einstein Foundation Berlin

8 Months research fellowship (2019–2020)

Poitiers University Award

€600 - Prix de thèse 2018 ⁽²⁾

Einstein Foundation Berlin

4 Months research fellowship (2017)

Clay Mathematics Institute

\$1000 - Travel grant Bucharest IAG (September 2017)

GDRI “Representation Theory” 2016-2019

€1000 - Visiting Berlin Humboldt University (May 2017)

Ecole Doctorale S2IM - Mobilité Internationale

²Awarded for a distinguished PhD thesis in the science section

€800 - Visiting Berlin Humboldt University (May 2017)

Laboratoire Ypatia des Sciences Mathématiques

€3000 - Visiting University of Rome Tor Vergata (March-May 2017)

Ecole Doctorale S2IM - Mobilité Internationale

€2000 - Visiting University of Rome Tor Vergata (January 2015)

Organized and co-organized activities

Oberseminar zur Algebra und Zahlentheorie

2018–2019. University of Augsburg, Germany

Research working group “Derived categories and stability conditions”

Spring 2018. University of Augsburg, Germany

Ph.D. students seminar “Seminaire en Liberté”

2014–2017. LMA, Poitiers, France

Conference “Et Après la Thèse?”

June 26, 2015, Université de Poitiers, Poitiers, France

Workshops and schools attended

EMS Summer School “Curves and surfaces, a history of shapes”

September 1–5, 2019, Levico, Italy

Trieste Algebraic Geometry Summer School

July 1–5, 2019, Trieste, Italy

Young Perspectives in Algebraic Geometry

April 3–5, 2019, Bayreuth, Germany

Workshop on Complex Algebraic Geometry – Pirola 60th

February 5–9, 2018, Barcelona, Spain

Géométrie algébrique et géométrie complexe 2017

December 11–15, 2017, CIRM, Luminy, France

Instruments of algebraic geometry

September 11–22, 2017, Bucharest, Romania

Modern algebra and classical geometry Together with Edoardo Sernesi

June 21–24, 2017, Trento, Italy

Mediterranean Complex Projective Geometry

May 23–27, 2016, Carry-le-Rouet, France

Géométrie algébrique et géométrie complexe 2015

November 23–27, 2015, CIRM, Luminy, France

Cox Rings and Mori Dream Spaces

September 6–12, 2015, Lukecin, Poland

SMI Cortona 2015

August 3–14, 2015, Cortona, Italy

ACM Bundles on Algebraic Varieties

June 15–19, 2015, Ankara, Turkey

Workshop on geometry and arithmetic of hyperkähler manifolds

February 9–11, 2015, IAG, Hannover, Germany

Géométrie algébrique et géométrie complexe 2014

November 24–28, 2014, CIRM, Luminy, France

SMI Perugia 2014

July 28 - August 28, 2014, Perugia, Italy

Around Torelli's theorem for K3 surfaces

October 25 - November 1, 2013, IRMA, Strasbourg, France

Teaching

Algebraic geometry II (2018-2019)

Lecturer. MSc course (7 students)

University of Augsburg

Algebraic geometry I (2018-2019)

Lecturer. MSc course (10 students)

University of Augsburg

Special topics in algebra and geometry (2017-2018)

Lecturer. MSc course (6 students)

University of Augsburg

Seminar in harmonic analysis (2017-2018)

Assistant. MSc course (16 students)

University of Augsburg

Methodologie M2 (2015-2016)

Assistant. MSc course (5 students)

Université de Poitiers

Linear Algebra 1 (2012-2013)

Assistant. BSc course (180 students)

University of Milan

Students supervision

Claudia Fevola (2019)

University of Augsburg and Università degli Studi di Napoli Federico II

MSc thesis “Even Sets of Eight Rational Curves on a K3 Surface”

Currently, Claudia is a PhD candidate at the Max Planck Institute in Leipzig.

Service and responsibilities

Elected member of the mathematics department council (2016–2017)

Laboratoire de Mathématiques et Applications

Université de Poitiers

Elected representative of PhD students of the Doctoral School S2IM (2014–2017)

Ecole Doctorale Sciences et Ingénierie pour l'Information et Mathématiques

Université de Poitiers

Personal skills

Programming languages

C, Java

General computer skills

Working experience in web design, HTML, javascript

Languages

Italian (native)

French (fluent)

English (fluent)

Greek (advanced intermediate)

German (intermediate)

Spanish (early intermediate)

Referees — Letters of recommendation

Andreas Leopold Knutsen

University of Bergen

Marc Nieper-Wisskirchen

University of Augsburg

Alessandra Sarti

University of Poitiers