Curriculum Vitae of Roberto Pignatelli

Associate Professor

Department of Mathematics

University of Trento

Memberships of Editorial Boards

2020-today: Topic Editor for Mathematics,
JCR 2019 Impact Factor 1.747, JCR Category rank Q1 (28/324) in Mathematics.

Career since graduation

- 2014/10-today: Associate Professor at the University of Trento
- 2003/01-2014/09: Assistant Professor (*Ricercatore*) at the University of Trento
- 2001/09-2002/12: Assistant Professor (*Wissenschaftlicher Assistent*) at the Universität Bayreuth
- 2000/04-2001/08: Assistant Professor (*Wissenschaftlicher Assistent*) at the Universität Göttingen

Habilitations

- 2017, March 28th: Italian scientific qualification for the position of full professor in Geometry and Algebra (*Abilitazione Scientifica Nazionale per il ruolo di professore di I fascia per il Settore Concorsuale 01/A2*) valid until march 28th, 2026
- 2013, December 24th: Italian scientific qualification for the position of associate professor in Geometry and Algebra (*Abilitazione Scientifica Nazionale per il ruolo di professore di II fascia per il Settore Concorsuale 01/A2*) valid until december 24th, 2022

Degrees Awarded

- 2000, February 25th: Ph. D. in Mathematics at the University of Pisa
- 1994, July 14th: *Diploma in Matematica* at the *Scuola Normale Superiore di Pisa*
- 1994, July 14th: M.Sc. in Mathematics with highest honors (*110/110 e lode*) at the University of Pisa

Publications

In preparation

a. D. Conti, A. Ghigi, —, *Galois covers: a database.*

b. S. Coughlan, —, *Simple fibrations in (1,2) surfaces.*

c. F. Fallucca, —, *Galois k-double covers of the plane of geometric genus 3 and canonical system base point free.*

d. M. Penegini, —, *Towards the Mumford-Tate conjecture for a family of surfaces with $p_g=q=2$ and $K^2=7$.*

Preprints

A. F. Fallucca, —, *Some surfaces with canonical map of degree 4*, arXiv:2107.07966.

B. D. Conti, A. Ghigi, —, *Some evidence for the Coleman-Oort conjecture,* arxiv:2102.12349,

C. C. Gleissner, —, C. Rito, *New surfaces with canonical map of high degree*. arxiv:1807.11854, to appear on Commun. Anal. Geom.

Published papers

1. M. Penegini, —, *Note on a family of surfaces with $p_g=q=2$ and $K^2=7$,* arxiv:2012.05636, Bollettino U.M.I. (online), special issue dedicated to Fabrizio Catanese, https://doi.org/10.1007/s40574-021-00305-5
2. C. Boehning, Hans-Christian Graf von Bothmer, —, *A rigid, not infinitesimally rigid surface with K ample,* arxiv:2010.14371, Bollettino U.M.I. (online), special issue dedicated to Fabrizio Catanese, https://doi.org/10.1007/s40574-021-00296-3
3. I. C. Bauer, —, *Rigid but not infinitesimally rigid compact complex manifolds*. arxiv:1805.02559, Duke Math. J. Advance Publication 1 - 24, 2021 https://doi.org/10.1215/00127094-2020-0062
4. F. F. Favale, C. Gleissner, —, *The pluricanonical systems of a product-quotient variety*. Galois Covers, Grothendieck-Teichmüller Theory and Dessins d'Enfants - Interactions between Geometry, Topology, Number Theory and Algebra, 89-119,

Springer Proc. Math. Stat. **330**, Springer, Cham, 2020 https://doi.org/10.1007/978-3-030-51795-3_6

5. —, *Quotients of the square of a curve by a mixed action, further quotients and Albanese morphisms,* Rev. Mat. Complut. **33** (2020), 911-931 https://doi.org/10.1007/s13163-019-00337-8
6. —, F. POLIZZI, *A family of surfaces with p_g=q=2, K^2=7 and Albanese map of degree 3,* Math. Nachr. **290** (2017), no. 16, 2684-2695
7. F.F. FAVALE, —, *A twisted bicanonical system with base points,* Ann. Univ. Ferrara Sez. VII Sci. Mat. **63** (2017), no. 1, 113-131
8. I. C. BAUER, —, *Product-quotient surfaces: new invariants and algorithms,* Groups, Geom. Dyn. **10** (2016), no. 1, 319-363
9. —, *On quasi étale quotients of a product of two curves*, Beauville Surfaces and Groups, 149-170, Springer Proc. Math.Stat. **123**, Springer, Cham, 2015
10. D. FRAPPORTI, —, *Mixed quasi-étale quotients with arbitrary singularities*, Glasg. Math. J. **57** (2015), no. 1, 143-165
11. G. BINI, F.F. FAVALE, J. NEVES, —, *New examples of Calabi-Yau 3-folds and genus zero surfaces*, Commun. Contemp. Math. **16** (2014), no. 2, 1350010, 20pp.
12. —, *Computer aided algebraic geometry: constructing surfaces of genus zero,* Future vision and trends on shapes, geometry and algebra, 95-105, Springer Proc. Math. Stat. **84**, Springer, London, 2014
13. F. CATANESE, W. LIU, —, *The moduli space of even surfaces of general type with K^2=8, p_g=4 and q=0,* J. Math. Pures Appl. (9) **101** (2014), no. 6, 925-948
14. J. NEVES, —, *Unprojection and deformations of tertiary Burniat surfaces*, Ann. Sc. Norm. Super. Pisa Cl. Sci. (5) **13** (2014), no. 1, 225-254
15. E. BALLICO, —, L. TASIN, *Weighted hypersurfaces with either assigned volume or many vanishing plurigenera*, Comm. Algebra **41** (2013), no. 10, 3745-3752
16. I. C. BAUER, —, *The classification of minimal product-quotient surfaces with p_g=0*, Math. Comp. **81** (2012), no. 280, 2389-2418
17. I. C. BAUER, F. CATANESE, F. GRUNEWALD, —, *Quotients of products of curves, new surfaces with p_g=0 and their fundamental groups*, Amer. J. Math. **134** (2012), no. 4, 993-1049

18. —, *On surfaces with a canonical pencil*, Math. Z. **270** (2012), no. 1-2, 403-422

19. I. C. BAUER, F. CATANESE, —, *Surfaces of general type with geometric genus zero: a survey*, Complex and Differential Geometry, 1-48, Springer Proc. Math. **8**, Springer, Heidelberg, 2011

20. —, C. RASO, *Riemann surfaces with a quasi large abelian group of automorphisms,* Matematiche (Catania) **66** (2011), no. 2, 77-90

21. —, *Some (big) irreducible components of the moduli space of minimal surfaces of general type with $p_g=q=1$ and $K^2=4$*, Atti Accad. Naz. Lincei Rend. Lincei Mat. Appl. **20** (2009), no. 3, 207-226

22. I. C. BAUER, —, *Surfaces with $K^2=8$, $p_g=4$ and canonical involution*, Osaka J. Math. **46** (2009), no. 3, 799-820.

23. F. TONOLI, —, *On Wahl's proof of $\mu(6)=65$*, Asian J. Math. **13** (2009), no. 3, 307-310

24. I. C. BAUER, F. CATANESE, —, *The moduli space of surfaces with $K^2=6$ and $p_g=4$,* Math. Ann. **336** (2006), no. 2, 421-438

25. S. MANFREDINI, —, *Ruled surfaces and generic coverings,* Topology Appl., **153** (2006), no. 14, 2613-2623

26. F. CATANESE, —, *Fibrations of low genus*, I, Ann. Sci. École Norm. Sup. (4) **39** (2006), no. 6, 1011-1049

27. I. C. BAUER, F. CATANESE, —, *Complex surfaces of general type: some recent progress,* Global aspects of complex geometry 1-58, Springer, Berlin, 2006

28. S. MANFREDINI, —, *Chisini's conjecture for curves with singularities of type $x^n = y^m$*, Michigan Math. J. **50** (2002), no. 2, 287-312

29. I. C. BAUER, F. CATANESE, —, *Canonical rings of surfaces whose canonical system has base points,* Complex Geometry (Göttingen 2000) 37-72, Springer, Berlin, 2002

30. F. CATANESE, —, *On simply connected Godeaux surfaces,* Complex Analysis and Algebraic Geometry, 117-153, de Gruyter, Berlin, 2000

31. S. MANFREDINI, —, *Generic covers branched over $\{x^n = y^m\}$*, Topology Appl. **103** (2000), no. 1, 1-31

Abstracts of talks

I. —, *Varietà rigide non infinitesimamente rigide,* XXI Convegno dell'Unione Matematica Italiana, 2019, p. 421

II. —, *Deformazioni di Burniat terziarie,* XIX Convegno dell'Unione Matematica Italiana, Conferenze e Comunicazioni, Zanichelli 2011, p. 365

III. —, *Surfaces with $p_g=0$: computer aided constructions*, Report n. 44/2009, Workshop "Complex Algebraic Geometry", September 27th-October 2nd, 2009, M.F.O., 2009, 2527-2530

IV. —, *Fibrations of low genus and surfaces with $q=p_g=1$*, Report n. 7/2005, Workshop "Komplexe Algebraische Geometrie", February 13th-19th, 2005, M.F.O., 2005, pp. 448-450

V. —, *Extrasymmetric matrices and surfaces with $p_g=4$ and $K^2=6$*, Report n. 9/2004, Mini-Workshop "Classification of Surfaces ...", February 15th -21st, 2004, M.F.O., 2004, pp. 466-470

VI. F. Catanese, —, *On pencils of small genus,* Report n. 9/2004, Mini-Workshop "Classification of Surfaces ...", February 15th-21st, 2004, M.F.O., 2004, pp. 454-457

Lecture notes

- 2020: Advanced Geometry
- 2015: Surfaces of general type

Reviews

- 37 reviews for the Mathematical Reviews of the American Mathematical Society (MathSciNet)
- 65 reviews for Zentralblatt MATH

DESCRIPTION OF THE RESEARCH

I'm mainly working on compact complex algebraic surfaces.

The (smooth compact complex) curves have a complete topological/deformation invariant, the genus. Two curves are deformation equivalent, *i.e.* there is a flat family over a connected base where both manifolds appear as fibers, if and only if they are homeomorphic as topological spaces, *i.e*, they have the same genus. This leads to the moduli space of the curves of fixed genus, a smooth (as orbifold) space parametrizing the complex structures on a fixed compact topological surface. This implies for example that the space of the complex structures on a compact topological surface is irreducible.

The situation in higher dimension is very different. No set of known discrete invariants for (smooth compact complex) surfaces is complete neither from the topological nor from the deformation theorist point of view. It is not even true that two homeomorphic complex surfaces can be deformed one to the other (a famous conjecture disproved in the 90s). We still do not know all possible complex structures of simple topological objects as $S^2 x S^2$.

For surfaces of general type ("most" surfaces from several point of view) it makes sense to restrict to "minimal" ones, those not containing any rational curve with self-intersection -1, since we can contract all of them to a smooth surface birational to the original one, and since by a Theorem of Fujita these curves are preserved by deformation. For these surfaces there exists a coarse moduli space, whose construction is due to Gieseker, parametrizing the minimal surfaces of general type. The Gieseker moduli space is in general very singular, as the Kuranishi family, a germ of analytic space parametrizing all small deformations of the complex structure. Ravi Vakil proved that they respects *Murphy's law*, meaning that essentially every singularity of finite type over the integers may appear.

There are several related interesting questions. A very uncomplete list of problems I like is the following

- Construction/classification/study of the geometry of the surfaces with minimal Euler characteristic of the structure sheaf *also known as Mumford's dream*
- Construction/classification/study of the geometry of the surfaces with canonical map of high degree
- Description of the moduli spaces of manifolds of fixed topological type, with emphasis on connectedness and irreducibility problems

- Geography of higher dimensional varieties of general type
- Construction/classification/study of rigid manifolds, differentiable manifolds whose complex structure can't be deformed.

I mostly use the following methods:

1. taking abelian covers of simpler surfaces, mostly rational or ruled surfaces
2. taking quotients of simpler surfaces as products of curves
3. constructing fibrations on manifolds of small dimension (mostly 1)
4. studying flat deformations of the canonical ring

A recent interesting (in my opinion) result that I have obtained comes by a question by Morrow and Kodaira (1971), asking for a complex manifold that is *rigid*, meaning that its complex structure has no nontrivial deformations, but not *infinitesimally*, so that non-trivial infinitesimal deformations exist. In other words an example when the base of the Kuranishi family is a nonreduced point.

We give a first positive answer in every dimension higher than 1. A key step is a rigidity criterion for surfaces with canonical system not ample (then not infinitesimally rigid by a result of Burns and Wahl). Then we construct a suitable family of *product-quotient surfaces* answering the aforementioned question. Recently we constructed a rigid not infinitesimally rigid surface with canonical system ample as abelian cover of the plane branched on lines: here the strategy for computing the base of the Kuranishi family comes by the aforementioned paper by Ravi Vakil.

I have worked a lot on the study of the quotient of product of curves in the last years. As a result we have few MAGMA programs constructing quotient of product of curves with prescribed value of the Chern numbers, filling some "holes" in the geography and answering some open questions as the just mentioned one by Morrow and Kodaira. Recently we adapted some of these programs to study curves with several automorphisms, obtaining some strong evidence for a conjecture due to Coleman and Oort. There is an online database of family of curves with automorphisms due to J. Paulhus that is essentially complete up to genus 15 but redundant (meaning that two data may give the same family). We are working (with D. Conti and A. Ghigi) on a data that is not redundant and should contain much more families: that should make the aforementioned constructions much more feasible.

CONFERENCES & TALKS

CONFERENCES ORGANIZED

- Gargnano, May 16th-22nd, 2020 (delayed to 2022 because of the COVID-19 pandemic): *Complex Algebraic Geometry and related topics – in honor of Fabrizio Catanese on the occasion of his 70th birthday*
- Levico Terme, January 7th-11th, 2019: *A Journey through Projective and Birational Geometry – Together with Marco Andreatta*
- Trento, July 11th-13th, 2018: *Recent Progress in the Arithmetic and Geometry of K3 surfaces*
- Levico Terme, August 31st- September 4th, 2015: *Classification of Projective Varieties*
- Cetraro, September 8th-15th, 2013: *Classification of Algebraic Varieties and Related Topics*
- Trento, February 10th, 2012: *A Day of Algebraic Geometry*
- Levico Terme, June 4th-9th, 2007: *Algebraic Geometry in Higher Dimension*

PARTICIPATION AT CONFERENCES AS INVITED SPEAKER

- Portoroz (SVN), June 20th-26th, 2021: 8th European Congress of Mathematics – Minisymposium Arithmetic and Geometry of Algebraic Surfaces (MS - ID 45)
- Milano, September 16th-17th, 2019: *Geometria in Bicocca 2019*
- Pavia, September 2nd-7th, 2019: *XXI Congresso dell'Unione Matematica Italiana*
- Cetraro, September 6th-15th, 2018: *Differential, Algebraic and Topological Methods in Complex Algebraic Geometry*
- Leicester (UK), June 5th-7th, 2018: *Workshop on Galois-covers, Grothendieck Teichmüller Theory and Dessins d'Enfants*
- Rio de Janeiro (BR), August 29th- September 2nd, 2016: *1st Joint Meeting Brazil-Italy in Mathematics*
- Roma, January 11th-15th, 2016: *Birational Geometry of Surfaces*
- Lisbon (P), July 1st-3rd, 2015: *Conference on Algebraic Surfaces (M. Mendes Lopes 60th birthday)*
- Angers (F), June 2nd-6th, 2014: *Moduli Spaces of Real and Complex Varieties*
- Trento, February 3rd-4th, 2014: *2nd FIRB Moduli Spaces and Their Applications Workshop*
- Bielefeld (D), December 6th, 2013: *A superficial afternoon*
- Cosenza, June 12th-14th, 2013: *New Trends in Algebraic Geometry*
- Trento, October 9th-11th, 2012: *3rd SAGA Workshop*
- Newcastle (UK), June 7th-9th, 2012: *Beauville Surfaces and Groups*
- Pavia, March 8th-9th, 2012: *Giornate di Geometria 3*
- Bayreuth (D), February 21st-23rd, 2012: *Treffen der Forschergrupper 790*
- Bologna, September 12th-17th, 2011*: XIX Congresso dell'Unione Matematica Italiana*
- Padova, May 16th-25th, 2011*: Two weeks of Classical Algebraic Geometry*
- Shanghai (CN), May 10th-14th, 2010: *Algebraic Geometry on Varieties and Manifolds*
- Seoul (ROK), March 2nd-5th, 2010: *Algebraic Surfaces and their Compact Moduli*

- Milano, November 19th-20th, 2009: *Some Topics in Commutative Algebra and Algebraic Geometry*
- Oberwolfach (D), September 27th- October 3rd, 2009: *Complex Algebraic Geometry*
- Pisa, October 29th-31st, 2008: *Workshop on Algebraic Surfaces*
- Almería (E), June 6th-10th, 2005: *International Mediterranean Congress in Mathematics*
- Oberwolfach (D), February 13th-19th, 2005: *Komplexe Algebraische Geometrie*
- Utrecht (NL), June 4th-6th, 2004: *Algebraic Geometry and Commutative Algebra*
- Milano, April 1st-2nd, 2004: *Algebraic Curves, Monodromy, and Related Topics*
- Taipei (RC), March 22nd-28th, 2004: *Higher Dimensional Algebraic Geometry*
- Oberwolfach (D), February 15th-21st, 2004: *Classification of Surfaces of General Type with Small Invariants*
- Ferrara, September 3rd-7th, 2002: *Birational and Projective Geometry of Algebraic Varieties*
- Cambridge (UK), March 8th-10th, 2001: *COW Extended Activity*
- Gargnano, May 23rd-27th, 2000: *Giornate di Geometria Algebrica e Argomenti Correlati V*
- Furore, October 8th-13th, 1999: *Workshop on Algebraic Surfaces*
- Pisa, June 8th-13th, 1998: *Meeting of Young European Researchers in R.A.A.G.*

SELECTED TALKS

- University of Warwick (online), April 21st, 2020: *Rigid compact complex surfaces that are not infinitesimally rigid*
- Università di Padova, April 2nd, 2019: *Rigid but not infinitesimally rigid compact complex manifolds*
- Università di Pavia, March 5th, 2019: *On the Albanese morphism of a mixed quotient surface*
- Universität Bayreuth, April 18th, 2018: *Surfaces of general type with canonical map of high degree*
- Università di Genova, March 9th, 2017: *On semi-isogenous mixed surfaces*
- University of Coimbra (P), July 17th, 2013: *On quasi-étale quotients of products of two curves*
- Università di Ferrara, October 23rd, 2012: *3-varietà di Calabi-Yau con divisori ampi rigidi*
- University of Coimbra (P), June 27th, 2012: *Even surfaces with genus 4 and bigenus 13*
- Università di Milano, October 25th, 2011: *Una nuova costruzione di superfici di genere 0*
- Università di Pisa, February 16th, 2011*: Deformazioni di superfici di Burniat*
- University of Coimbra (P), June 9th, 2009: *Compact complex surfaces of genus 0*
- Técnico Lisboa (P), June 2nd, 2009: *Compact complex surfaces of genus 0*
- Università di Pavia, April 29th, 2009: *Surfaces with canonical map composed with a pencil*
- Università di Padova, April 8th, 2009: *Superfici di tipo generale con mappa canonica composta con un fascio*
- Sogang University (ROK), May 24th, 2008: *The relative canonical algebra of a fibration and the construction of surfaces of general type*
- Seoul National University (ROK), May 21th, 2008: *Compact complex surfaces whose holomorphic differential forms are identically zero*
- University of Leicester (UK), January 31st, 2008, Colloquium talk: *Compact complex*

surfaces and fibrations

- Università di Roma “Tor Vergata”, May 11th, 2007: *Superfici con p_g=q=1*
- Università di Pavia, March 16th, 2006: *Superfici con p_g=4*
- Università di Genova, April 26th, 2005: *Fibrazioni di genere basso e superfici con $q=p_g=1$*
- Università di Pisa, March 3rd, 2004: *Curve di genere 3 ed un problema di Horikawa*
- Università di Pavia, February 22nd, 2002: *Fibrazioni di genere basso*
- Università di Milano, February 21st, 2002: *Fibrazioni di genere piccolo*

VISITING SCHOLARSHIPS

- Warwick University, January 13th- May 1st, 2008
- Universität Bayreuth, September 21st- December 21st, 2007
- Institute of Mathematics of the Romanian Academy “Simion Stoilow”, March 4th - April 3rd, 2002
- Warwick University: February 19th- March 25th, 2001

MEMBERSHIPS

Member of

- European Mathematical Society
- Unione Matematica Italiana
- Istituto Nazionale di Alta Matematica – Gruppo Nazionale per le Strutture Algebriche, Geometriche e le loro Applicazioni

Member of the research groups

- PRIN 2017 *Moduli Theory and Birational Classification*, funded by the Italian Ministry of University and Research *MIUR* for three years
- PRIN 2015 *Geometria delle varietà algebriche*, funded by the Italian Ministry of University and Research *MIUR* for three years starting on february 5th, 2017

Formerly member of several national and international research groups, including

- 2013-2018: Futuro in Ricerca 2012 *Spazi di Moduli e Applicazioni* funded by the Italian Ministry of University and Research *MIUR*
- 2013-2015: PRIN 2010-2011 *Geometria delle varietà algebriche* funded by the Italian Ministry of University and Research *MIUR*
- 2010-2013: *Espaços de moduli en Geometria Algébrica* funded by the Fundação para a Ciência e a Tecnologia (Portugal)
- 2008-2010: PRIN 2007 *Proprietà geometriche delle varietà reali e complesse* funded by the Italian Ministry of University and Research *MIUR*
- 2006-2008: PRIN 2005 *Proprietà geometriche delle varietà reali e complesse* funded by the Italian Ministry of University and Research *MIUR*

EVALUATION ACTIVITIES

EVALUATION OF APPLICATIONS FOR FUNDING OF RESEARCH PROJECTS

- 2021, 2020, 2014: for the National Science Center, Poland
- 2015: for the Università dell'Insubria
- 2015: for the Università di Firenze
- 2014: for the Università di Padova
- 2014, 2011: for the Chilean Government Commission for Scientific and Technological Development

SELECTED MEMBERSHIPS OF EVALUATION COMMITTEES

- 2021: competition for a permanent position as associate professor in Geometry at the Università di Torino
- 2020: competition for a temporary position as assistant (RTD/A) in Geometry at the Università di Pavia
- 2019: competition for a permanent position as associate professor in Geometry at the Università di Padova
- 2015: competition for a permanent position as associate professor in Geometry at the Università di Verona
- 2014: admission at the Ph.D. program in Mathematics of the Università di Trento
- 2013: defense of three Ph.D. thesis in Mathematics at the Università di Pavia
- 2010: price "Federigo Enriques" for the best Ph.D. thesis in Algebraic Geometry
- 2009: defense of a Ph.D. thesis in Mathematics and Statistics for the Computation Sciences at the Università di Milano
- 2007: competition for a permanent position as assistant professor (*Ricercatore*) in Geometry at the Università di Pavia

REFEREE REPORTS

Regular activity as referee for several international mathematical journals

SERVICE AT THE UNIVERSITY OF TRENTO

CURRENTLY

- 2019 – today: Delegate of the Director of the Department of Mathematics for the diversity policies
- 2019 – today: Delegate of the Director of the Department of Mathematics for the program *Scholars at Risk*
- 2015 – today: Delegate of the Director of the Department of Mathematics for the *tavolo di coordinamento su Scuola, Formazione e TFA* of the University of Trento, that deals with all the activities of the University concerning teacher training
- 2014 – today: Person in charge of the activities of teacher training of the Department of Mathematics for the teachers of the class *Matematica e Scienze nella scuola secondaria di I grado A-28* (ex A059), teachers of Mathematics and Sciences whose students are mostly aged 10 to 13
- 2014 – today: Member of the Scientific Committee of the *Laboratorio di Didattica e Comunicazione della Matematica* of the Department of Mathematics
- 2013 – today: Person in charge of the Erasmus Exchange programs with the University of Barcellona
- 2013 – today: Person in charge of the Erasmus Exchange programs with the University of Bergen
- 2013 – today: Person in charge of the Erasmus Exchange programs with the Universität Tübingen
- 2004 – today: Person in charge of the Erasmus Exchange programs with the Universität Bayreuth

FORMERLY

- 2012-2015: Delegate of the Director of the Department of Mathematics for International Relations
- 2008-2015: Coordinator of the Double Degree Program in Mathematics among the Universities of Trento and Tübingen

- 2011: Person in charge of the tutoring program of the Department of Mathematics
- 2004-2008: member of the advisory board of the Università di Trento

TEACHING

GRADUATE STUDENTS

Currently supervisor of the Ph.D studies of Federico Fallucca.

Advisor of the Ph.D. Theses of

- Nicola Cancian, Ph.D in Mathematics with highest honors at the Università di Trento on July 21st, 2017
- Davide Frapporti, Ph.D in Mathematics at the Università di Trento on February 10th, 2012

LECTURES FOR GRADUATE STUDENTS

- May 25th-29th, 2015: Surfaces of general type, during the activity Algebraic Varieties and their Moduli, Centro di Ricerca Matematica Ennio De Giorgi, Pisa
- March 2nd-5th, 2010: exercise sessions during the *KIAS Winter School on Algebraic Geometry*, KIAS, Seoul (ROK)

UNDERGRADUATE STUDENTS

Advisor of

- 1 Double Degree Thesis in Mathematics at the Universities of Trento and Tübingen
- 11 M.Sc. Theses in Mathematics at the Università di Trento
- 21 Bachelor Theses in Mathematics at the Università di Trento

LECTURES FOR UNDERGRADUATE STUDENTS

- Geometria 1 – Laurea in Fisica e Laurea in Filosofia – Trento – A.Y. 2016/17, 2017/18, 2018/19, 2019/20, 2020/21
- Advanced Geometry - Laurea Magistrale in Matematica – Trento – A.Y. 2009/10, 2010/11, 2012/2013, 2013/14, 2014/15, 2015/16, 2016/17, 2017/18, 2018/19, 2019/20, 2020/21
- Geometria A – Laurea in Matematica – Trento – A.Y. 2015/16
- Didattica della Matematica – PAS per la classe A059 – A.Y. 2014/15, 2015/16
- Didattica della Matematica – TFA per la classe A059 – A.Y. 2014/15
- Fondamenti Matematici per l'Informatica – Laurea in Informatica – Trento – A.Y. 2014/15
- Algebraic Geometry II - Laurea Magistrale in Matematica – Trento – A.Y. 2013/14
- Complex Algebraic Geometry – Dottorato in Matematica – Trento – A.Y. 2013/14
- Geometria I - Laurea in Matematica e Laurea in Fisica – Trento – A.Y. 2011/2012
- Istituzioni di Geometria Superiore 2 – Laurea e Laurea Specialistica in Matematica – Trento – A.Y. 2006/2007, 2008/2009
- Istituzioni di Geometria Superiore – Laurea e Laurea Specialistica in Matematica – Trento – A.Y. 2003/2004, 2004/2005, 2005/2006, 2006/2007, 2008/2009
- Matematica Discreta I – Laurea in Informatica – A.Y. 2005/2006
- Geometria e Algebra – Laurea in Ingegneria delle Telecomunicazioni – A.Y. 2004/2005
- Algebra – Lehramt Gymnasium Mathematik – Göttingen – A.Y. 2000/01
- Proseminar über Geometrie – Diplom Mathematik - Göttingen – A.Y. 1999/2000

Trento, November♦ 1st, 2021