

**CURRICULUM VITAE**  
**MARGHERITA LELLI-CHIESA**

**Part I – GENERAL INFORMATION.**

Full name: Margherita Lelli-Chiesa  
Place of birth: Pescara (PE), Italy  
Date of birth: February 16, 1986  
Languages: Italian (native), English, German (fluent).

**Part II – RESEARCH INTERESTS.**

**Research area:** Algebraic geometry.  
**Keywords:** Moduli spaces of curves, Brill-Noether theory, Moduli spaces of sheaves, K3 surfaces, abelian varieties, Hyperkähler varieties.

**Part III – EDUCATION AND TRAINING.**

- September 2004–July 2007: Laurea triennale in Mathematics, Sapienza University of Rome. Grade: 110/110 cum laude.
- March 2008–August 2008: Erasmus Programme Visit, Universität Heidelberg.
- September 2007–July 2009: Laurea specialistica in Mathematics, Sapienza University of Rome. Grade: 110/110 cum laude.
- October 2009–September 2012: Ph.D. in Mathematics, Humboldt Universität zu Berlin; financially supported by BMS (Berlin Mathematical School). Grade: Summa cum Laude.  
Thesis title: Gieseker-Petri divisors and Brill-Noether theory of K3-sections  
Advisor: Gavril Farkas

**Part IV – ACADEMIC AND RESEARCH POSITIONS.**

**IV A – Academic positions.**

- 1 November 2019–: Università degli Studi Roma Tre: Associate Professor.
- 1 September 2017– 31 October 2019 (**on maternity leave May–October 2018**): Università degli Studi dell’Aquila, Type B Researcher.
- 4 January 2016–31 August 2017 (**on maternity leave April–December 2016**): Università degli Studi di Pisa, Type A Researcher.
- 1 October 2015–31 December 2015: Università degli Studi di Roma Tre, Research fellow.
- 1 October 2013–30 September 2015: Centro di Ricerca Matematica Ennio De Giorgi, SNS Pisa, Research fellow.
- 1 October 2012–30 September 2013: Max Planck Institute for Mathematics Bonn, Post-Doc.

**IV B – Scientific qualification.**

- 24 May 2021: Abilitazione Scientifica Nazionale to full professorship (MAT 01/A2).

**IV C – Other research activities.**

- January 2015–February 2015: Guest (invited participant) of the intensive programme “Moduli Spaces and Derived Categories” within the Warwick EPSRC Symposium 2014–2015, Warwick.
- January 2014–March 2014: Participant and organizer of some activities of the Junior Trimester Program “Algebraic Geometry”, Hausdorff Center for Mathematics, Bonn.

- May–June 2011: Guest (affiliated participant) of the intensive programme “Moduli Spaces”, Isaac Newton Institute, Cambridge UK.

## Part V – TEACHING.

### V A – Undergraduate teaching

- September 2024–December 2024: “AL410 - Algebra Commutativa” for Mathematicians, Università degli Studi Roma Tre.
- September 2024–December 2024: “GE210 - Geometria e Algebra Lineare 2” for Mathematicians, Università degli Studi Roma Tre.
- February 2024–June 2024: “GE110 - Geometria e Algebra Lineare 1” for Mathematicians, Università degli Studi Roma Tre.
- September 2023–December 2023: “GE410 - Geometria Algebraica 1” for Mathematicians, Università degli Studi Roma Tre.
- September 2022–January 2023: “Geometria” for Mechanical Engineers, Università degli Studi Roma Tre.
- September 2022–December 2022: “GE210 - Geometria e Algebra Lineare 2” for Mathematicians, Università degli Studi Roma Tre.
- February 2022–June 2022: “GE110 - Geometria e Algebra Lineare 1” for Mathematicians, Università degli Studi Roma Tre.
- September 2021–January 2022: “Geometria” for Mechanical Engineers, Università degli Studi Roma Tre.
- September 2020–January 2021: “AL410 - Algebra Commutativa” for Mathematicians, Università degli Studi Roma Tre.
- September 2020–January 2021: “Geometria” for Mechanical Engineers, Università degli Studi Roma Tre.
- February 2020–June 2020: “AL410 - Algebra Commutativa” for Mathematicians, Università degli Studi Roma Tre.
- February 2020–June 2020: Esercitazioni del corso “GE110 - Geometria e Algebra Lineare 1” for Mathematicians, Università degli Studi Roma Tre.
- November 2019–January 2020: Esercitazioni del corso “GE210 - Geometria e Algebra Lineare 2” for Mathematicians, Università degli Studi Roma Tre.
- February 2019– June 2019: “Istituzioni di Geometria Superiore I” for Mathematicians, Università degli Studi dell’Aquila.
- September 2017–January 2018: “Geometria A” for Mathematicians and Physicists, Università degli Studi dell’Aquila, (together with Prof. L. Fania).
- March 2017–May 2017: “Geometria 2” for Mathematicians, Università degli Studi di Pisa, (two terms, together with Prof. F. Broglia).
- February 2017–May 2017: “Geometria I” for Physicists, Università degli Studi di Pisa, (two terms, together with Prof. M. Salvetti).
- February 2016–March 2016: “Matematica per Scienze Geologiche e per Scienze Naturali e Ambientali”, Università degli Studi di Pisa, (together with Prof. M. Abate).
- February 2016–March 2016: Recitation sections of “Geometria I” for Physicists, Università degli Studi di Pisa.
- September 2015–December 2015: Recitation sections of “Mathematics 2”, Faculty of Economics and Business of Luiss (Libera Università Internazionale degli Studi Sociali “Guido Carli”, Roma);
- 2008–2009: Recitation sections of “Geometria” for Engineers, Sapienza University of Rome.

### V B – Graduate teaching

- February 2021–April 2021: “Curves and bundles on surfaces with trivial canonical bundle”, Università degli Studi Roma Tre, (together with Prof. A. Bruno).

- February 2015–May 2015: “Geometria delle varietà algebriche”, Scuola Normale Superiore di Pisa, (together with Prof. A. Vistoli).

#### V C – Ph.D. advisees.

- January 2023–: Martina Miseri, Università degli Studi di Roma Tre.
- November 2018–July 2022: Simona D’Evangelista, Università degli Studi dell’Aquila, “Brill-Noether theory for étale double covers”.

#### V D – Undergraduate advisees.

- March 2025 (expected): Luca Rocchi, “Abelian varieties”.
- October 2024: Chiara Consorti, “Schubert Calculus”.
- January 2023: Silvia Quadraccia, “The theory of Syzygies”.
- October 2022: Martina Miseri (currently Ph.D. student, Università degli Studi Roma Tre), “Brill-Noether theory: classification of exceptional curves”.
- October 2022: Ginevra Giordani (currently Ph.D. student, Università degli Studi dell’Aquila), “Hermite Reciprocity and Schwarzenberger Bundles”.

#### IV E – Postdoctoral mentoring.

- July 2024–: Sara Torelli.
- October 2022–September 2024: Angelina Zheng.

#### IV E – Ph.D. thesis reviews.

- December 2024 (expected): Qiangru Kuang (SISSA).
- June 2024: Federico Moretti (Humboldt Universität zu Berlin).
- March 2024: Dario Faro (Università di Pavia).

#### Part VI – PRIZES AND AWARDS.

- 2015: “Premio Mario Baldassarri” Award from Unione Matematica Italiana for the publication M. Lelli-Chiesa, *Generalized Lazarsfeld-Mukai bundles and a conjecture of Donagi and Morrison*, with an Appendix joint with A. L. Knutsen, *Advances in Mathematics* **268** (2015), 529–563.
- August 2015: Selected participant in the “3rd Heidelberg Laureate Forum”.
- 2012: Certificate of Distinction, BMS (Berlin Mathematical School).
- October 2009–September 2012: Financial support from BMS fellowship.
- September 2007–July 2009: INdAM fellowship for Laurea Magistrale students in Mathematics.
- December 2006: Award for best student in the second year of the Laurea Triennale in Mathematics, Sapienza University of Rome.
- December 2005: Award for best student in the first year of the Laurea Triennale in Mathematics, Sapienza University of Rome.

#### Part VII – FUNDING, MANAGEMENT AND COORDINATION OF RESEARCH GROUPS.

##### VII A – Direction and coordination of research.

- 2024–2027: **Member of Scientific Board INdAM.**
- January 2023–: Member of Scientific Board of Research group “VBAC - Vector Bundles on Algebraic Curves”.
- Scientific Director of the Roma Tre Research Unit of PRIN Project 2020 - 2020KKWT53 “Curves, Ricci flat Varieties and their Interactions” (P.I.: G. Mongardi).
- Scientific Director of the Università dell’Aquila Research Unit of PRIN Project 2017 - 2017SSNZAW “Moduli Theory and Birational Classification”. (P.I.: L. Caporaso).
- January 2014–March 2014: Principal Investigator of the Research Group “Brill-Noether methods in the study of Hyperkähler and Calabi-Yau Manifolds” within the Junior

Trimester Program “Algebraic Geometry”, Hausdorff Center for Mathematics, Bonn. (Other group members: F. Gounelas, G. Mongardi, G. Saccà).

The Research group organized three mini-courses (E. Arbarello, A. L. Knutsen and E. Sernesi) and a workshop.

#### VII B – Other funding.

- December 2017: FFABR funding( “Fondo per il finanziamento delle attività base di ricerca”).
- February 2012: Member of BMS delegation applying (and receiving) extension of DFG (Deutsche Forschungsgemeinschaft) funding.

#### VII C – Other organizing activities.

- Co-organizer of the workshop “Algebraic Geometry in L’Aquila”, L’Aquila, July 2023.
- Co-organizer of the workshop “Algebraic Geometry in Roma Tre, on the occasion of Sandro Verra’s 70th birthday”, Roma, June 2022.
- Co-organizer of “PinKamP 2019”, summer school for high-school female students in STEM (Science, Technology, Engineering, Mathematics) topics, Università degli Studi dell’Aquila, June 2019.
- Co-organizer of the Follow-up Workshop to the Junior Trimester Program “Algebraic Geometry”, Hausdorff Center for Mathematics, Bonn, April 2018.
- Co-organizer of the workshop “Algebraic Geometry and Representation Theory in Rome”, Roma, December 2015.
- Co-organizer of the workshop “Incontro natalizio di algebra e geometria”, Roma, December 2011.
- Local co-organizer of “GAEL XIX”, Berlin, July 2011.

#### VII D – Participation in research groups.

- Participant in the PRIN Project 2022 - 2022L34E7W “Moduli Spaces and Birational Geometry” (P.I.: A.Rapagnetta).
- March 2018–August 2019: Member of “FamCurves - Studio dei moduli e delle varietà correlate relativi alle famiglie di curve”, progetto di ateneo of Università degli Studi di Roma Tor Vergata, supported by “Mission: Sustainability” programme. (P.I.: F. Flamini).
- Since 2013: Member of “GNSAGA (Gruppo Nazionale per le Strutture Algebriche, Geometriche e le loro Applicazioni)”.
- 2009–2012: Member of SFB 647 (Sonderforschungsbereich 647 “Raum-Zeit-Materie. Analytische und Geometrische Strukturen”) supported by DFG.

#### Part VIII – PUBLICATIONS AND PREPUBLICATIONS.

- (1) M. Lelli-Chiesa, *Gieseker-Petri divisors and Brill-Noether theory of  $K3$ -sections*, Ph.D. thesis, <http://edoc.hu-berlin.de/dissertationen/lelli-chiesa-margherita-2012-09-20/PDF/lelli-chiesa.pdf>
- (2) M. Lelli-Chiesa, *The Gieseker-Petri divisor in  $\mathcal{M}_g$  for  $g \leq 13$* , *Geometriae Dedicata* **158** (2012), 149-165.
- (3) M. Lelli-Chiesa, *Stability of rank-3 Lazarsfeld-Mukai bundles on  $K3$  surfaces*, *Proceedings of the London Mathematical Society* **107** (2013), 451–479.
- (4) M. Lelli-Chiesa, *Green’s Conjecture for curves on rational surfaces with an anticanonical pencil*, *Mathematische Zeitschrift* **275** (2013), 899–910.
- (5) M. Lelli-Chiesa, *Generalized Lazarsfeld-Mukai bundles and a conjecture of Donagi and Morrison*, with an Appendix joint with A. L. Knutsen, *Advances in Mathematics* **268** (2015), 529–563.
- (6) M. Lelli-Chiesa, *Curves on surfaces with trivial canonical bundle*, *Bollettino dell’Unione Matematica Italiana* **11** (2018), 93–105.
- (7) A. L. Knutsen, M. Lelli-Chiesa, G. Mongardi, *Severi Varieties and Brill-Noether theory of curves on abelian surfaces*, *Journal für die reine und angewandte Mathematik* **749** (2019), 161–200.

- (8) A. L. Knutsen, M. Lelli-Chiesa, G. Mongardi, *Wall divisors and algebraically coisotropic subvarieties of irreducible holomorphic symplectic manifolds*, Transactions of the American Mathematical Society **371** (2019), 1403–1438.
- (9) A. L. Knutsen, M. Lelli-Chiesa, S. Verra, *Moduli of non-standard Nikulin surfaces in low genus*, Annali della Scuola Normale Superiore di Pisa XXI (2020), 361–384.
- (10) A. L. Knutsen, M. Lelli-Chiesa, S. Verra, *Half Nikulin surfaces and moduli of Prym curves*, Journal of the Institute of Mathematics of Jussieu **20** (2021), 1547–1584.
- (11) M. L. Fania, M. Lelli-Chiesa, J. Pons-Llopis, *Ulrich bundles on three dimensional scrolls*, International Mathematics Research Notices **17** (2021), 13478–13507.
- (12) A. L. Knutsen, M. Lelli-Chiesa, *Genus two curves on abelian surfaces*, Annales Scientifiques de L'École Normale Supérieure **55** (2022), 905–918.
- (13) M. Lelli-Chiesa, *A codimension 2 component of the Gieseker-Petri locus*, Journal of Algebraic Geometry **31** (2022), 751–771.
- (14) S. D'Evangelista, M. Lelli-Chiesa, *Double covers of curves on Nikulin surfaces*, in Moduli Spaces and Vector Bundles-New Trends, Contemporary Mathematics **803** (2024), 153–170.
- (15) A. L. Knutsen, M. Lelli-Chiesa, S. Verra, *Unirational parametrization of  $\mathcal{R}_{g,2}$ ,  $\mathcal{R}_{g,4}$  and  $\mathcal{R}_{g,6}$  in low genera*, accepted for publication in Journal de l'École polytechnique–Mathématiques.
- (16) A. Bruno, M. Lelli-Chiesa, *Irreducibility of Severi varieties on K3 surfaces*, arXiv:2112.09398v3.
- (17) A. L. Knutsen, M. Lelli-Chiesa, *Pencils on general covers of an elliptic curve*, arXiv:2401.03519.

## Part IX – INVITED TALKS.

### IX A – Talks in national and international conferences and workshops.

- May 2024, Humboldt Universität zu Berlin. “Curves, abelian varieties and their moduli”.
- June 2023, Mathematisches Forschungsinstitut Oberwolfach. “Recent trends in Algebraic Geometry”.
- July 2022, University of Warwick. “VBAC 2022: Moduli Spaces and Vector Bundles - New Trends. On the occasion of Peter Newstead's 80th birthday”.
- June 2022, Krakow. “Recent Advances in Classical Algebraic Geometry”, **Satellite Conference of the 2022 ICM**.
- June 2022, Cortona. “Classical Elegance: the geometry of algebraic Varieties”.
- December 2021, Oslo. “Arithmetic and geometry of varieties with trivial canonical bundle”.
- September 2021, Cetraro. “Riposte armonie: Algebraic Geometry together with Ciro Ciliberto”.
- June 2019, Sandbjerg Estate, Sønderborg, Danimarca. “VBAC 2019 (GIT, Wall-crossings and Moduli spaces)”.
- June 2018, INdAM, Roma. INdAM Workshop “Birational Geometry and Moduli Spaces”.
- August 2016, ICTP, Trieste. “Workshop on Moduli Spaces, Mirror Symmetry and Enumerative Geometry”.
- January 2016, Università degli Studi di Roma Tor Vergata, Workshop “Birational Geometry of Surfaces”.
- September 2015, Siena. Short communication within “XX Congresso dell'Unione Matematica Italiana”.
- February 2015, Università di Torino. “Miniworkshop in Algebraic Geometry in Torino”.
- July 2014, Mathematisches Forschungsinstitut Oberwolfach. Young participant's presentation within “Classical Algebraic Geometry”.
- May 2014, Berlin. “Moduli and Automorphic Forms: a Meeting for Young Women in Mathematics”.

- May 2014, Università degli Studi di Milano. “Workshop on Syzygies and moduli of curves”.
- November 2013, Università degli Studi di Roma Tor Vergata. “Workshop on Severi Varieties and Hyperkähler Manifolds”.
- June 2013, SISSA, Trieste. “VBAC 2013 (Vector Bundles on Algebraic Curves)”.
- December 2012, Università degli Studi di Milano. “Workshop of Algebraic Geometry - Seminario di Natale 2012”.
- October 2012, Levico. “Progressi Recenti in Geometria Reale e Complessa”.
- June 2012, Mathematisches Forschungsinstitut Oberwolfach. Young participant’s presentation within “Classical Algebraic Geometry” meeting.
- May 2012, Hamburg. “NoGAGS (North German Algebraic Geometry Seminar)”
- May 2012, Pisa. “Giornate di Geometria Algebrica ed Argomenti Correlati IX”.
- December 2011, Università degli Studi di Roma La Sapienza. “Incontro natalizio di algebra e geometria”.
- June 2010, Mathematisches Forschungsinstitut Oberwolfach. Young participant’s presentation within “Classical Algebraic Geometry”.

#### **IX B – Seminari di ricerca presso università e centri di ricerca.**

- July 2024, Università degli Studi dell’Aquila.
- May 2023, Université de Toulouse.
- November 2022, Leibniz Universität Hannover.
- May 2022, Università di Bologna.
- November 2021, Università degli Studi di Roma Tor Vergata.
- October 2021, Virginia Commonwealth University.
- October 2021, Università degli Studi Roma Tre.
- May 2020, Brussels-London Geometry Seminar.
- February 2020, KTH Stockholm.
- January 2020, Humboldt Universität zu Berlin.
- December 2019, Università degli Studi di Roma La Sapienza.
- December 2019, Università degli Studi di Bologna.
- March 2018, Università degli Studi di Padova.
- February 2018, Humboldt Universität zu Berlin.
- October 2017, Università degli Studi dell’Aquila.
- February 2016, KU Leuven. Seminario di ricerca.
- January 2016, Université de Poitiers.
- October 2015, Università degli Studi di Roma Tre.
- September 2015, ETH Zürich.
- March 2015, Università di Pisa.
- January 2015, University of Warwick.
- December 2014, Università degli Studi di Roma La Sapienza.
- November 2014, Università degli Studi di Pavia.
- November 2014, Università degli Studi di Milano.
- November 2013, Scuola Normale Superiore di Pisa.
- March 2013, Université Lille 1.
- February 2013, Université Paris VI Pierre et Marie Curie.
- November 2012, Max Planck Institute for Mathematics, Bonn.
- July 2012, Università degli Studi di Roma La Sapienza.
- November 2011, Università degli Studi di Roma Tre.
- March 2011, Università di Trento.
- December 2010, Humboldt Universität zu Berlin.

#### **IX C – Colloquia, interviews.**

- May 2022, Università degli Studi Roma Tre. Colloquium within “Giornata INdAM 2022”.

- May 2019, Università degli Studi dell'Aquila. Colloquium within "Journey of Women in Math".
- March 2014, Pisa. Colloquium within "Mathematicians' Day".
- 2014: Interviewed for MaTeinItaly within Triennale Expo, Milan.
- February 2011, Berlin. Colloquium within "BMS Days".

#### Part X – PRESENTATION OF SCIENTIFIC RESULTS.

- Poster "Stability of rank-3 Lazarsfeld-Mukai bundles on arbitrary K3 surfaces" within "A Celebration of Algebraic Geometry", Cambridge Massachusetts, August 2011.
- Poster "The Gieseker-Petri divisor in  $\mathcal{M}_g$ " during "School on Moduli Spaces", Isaac Newton Institute, Cambridge UK, January 2011.

#### Part XI – OTHER ACTIVITIES.

##### XI A – Management activities.

- 2024–2027: **Member of Scientific Board INdAM.**
- January 2023–March 2023: Member of the *commissione criteri*, nominated by head of the Mathematics and Physics Dept. to set up criteria for deciding future academic openings, Università degli Studi Roma Tre.
- January 2023–: Member of the board of the graduate school in Mathematics, Università degli Studi Roma Tre.
- April 2022–: Contact person of the Mathematics and Physics Dept. with the Centro Linguistico di Ateneo (CLA), Università degli Studi Roma Tre.
- 2017–2019: Member of the *commissione orientamento* for prospective students of the Mathematics degree programme, Università degli Studi dell'Aquila.

##### XI B – Editorial activities.

- 2024–: Editor of Springer INdAM Series

##### XI C – Hiring committees.

- December 2023–February 2024: President of the committee for a Postdoctoral position in "Spazi di moduli e geometria birazionale", Università degli Studi Roma Tre.
- October 2024–: Committee member, RTT position, Università degli Studi di Pisa.
- May 2022: President of the committee for a Postdoctoral position in "Geometria delle varietà algebriche e loro spazi di moduli", Università degli Studi Roma Tre.
- August 2022–November 2022: Committee member, RTD A position, Sapienza University of Rome.
- May 2022: President of the committee for a Postdoctoral position in "Geometria delle varietà algebriche e loro spazi di moduli", Università degli Studi Roma Tre.
- February 2022–May 2022: Committee member, RTD A position, Università degli Studi di Padova.
- November 2021–January 2022: Committee member, RTD B position, Università degli Studi di Pisa.
- July 2021–September 2021: Committee member, admission to Ph.D. programme in Mathematics, Università degli Studi Roma Tre.
- July 2020: Member of the committee for a Postdoctoral position in "Teoria dei moduli e classificazione birazionale", Università degli Studi Roma Tre.
- January 2018: Member of the committee for a Postdoctoral position in Geometria, Università degli Studi dell'Aquila.

##### XI D – Other committees.

- Committee member for the following INdAM calls: "INdAM Research Projects", "Notte dei Ricercatori", "Incontri Cortona 2025", "Workshops 2025", "Intensive Periods 2025", "Visiting Professors 2025", .

##### XI E – Other services.

- Referee for *Mathematische Zeitschrift*, *Algebra and Number Theory*, *Journal de mathématiques pures et appliquées*, *Compositio Mathematica*, *SIGMA*, *Communications in Contemporary Mathematics*, *Bollettino dell'Unione Matematica Italiana*, *Algebraic Geometry*, *International Mathematics Research Notices*, *Journal für die reine und angewandte Mathematik*, *Journal of Pure and Applied Algebra*, *Lecture Notes in Mathematics*, *Rendiconti Lincei: Matematica e Applicazioni*.
- 2009–2010: Students' representative at BMS (Berlin Mathematical School, Berlin).