

# CURRICULUM VITAE - DANIELE AGOSTINI

January 31, 2020

## PERSONAL DATA

**Date of birth:** December 24, 1989.  
**Place of birth:** Chiaravalle, Italy.  
**Citizenship:** Italian.  
**Webpage:** [www.math.hu-berlin.de/~agostind/](http://www.math.hu-berlin.de/~agostind/)  
**Email:** [daniele.agostini@math.hu-berlin.de](mailto:daniele.agostini@math.hu-berlin.de)

## POSITIONS

**October 2018 - :** Postdoc in the Algebraic Geometry group at the Humboldt-Universität zu Berlin.

**April 2018 - September 2018:** Postdoc in the Nonlinear Algebra group at the Max-Planck-Institut for Mathematics in the Sciences, Leipzig.

## EDUCATION AND DEGREES

**August 2014 - April 2018 :** PhD studies in Mathematics at the Humboldt-Universität zu Berlin. Advisor: Prof. Dr. Gavril Farkas. Member of the Berlin Mathematical School, of the IRTG 1800 and of the DFG Schwerpunkt 1489.

**October 2011 - December 2014 :** *Diploma di Licenza* in Mathematics at the Scuola Normale Superiore, Pisa. Mark: 70 /70.

**October 2011 - May 2014 :** MSc (*Laurea Magistrale*) in Mathematics at the University of Pisa. Mark: 110/110 cum laude. Title of thesis: *Asymptotic syzygies of algebraic varieties*. Advisor: Prof. Giorgio Ottaviani.

**October 2008 - September 2011 :** BSc (*Laurea Triennale*) in Mathematics at the University of Pisa. Mark: 110/110 cum laude. Title of thesis: *Normalization of Noetherian rings* (in italian). Advisor: Prof. Patrizia Gianni.

## AWARDS

**October 2017 - November 2017:** DAAD scholarship for a research visit at Stony Brook University, USA.

**August 2014 - July 2017 :** PhD scholarship of the International Training and Research Group *Moduli and Automorphic Forms* of the DFG.

**October 2011 - December 2014 :** *Allievo Ordinario* at the Scuola Normale Superiore di Pisa.

## PUBLICATIONS

1. D.Agostini, L. Chua. *On the Schottky problem for genus five Jacobians with a vanishing theta null*, Ann. Scuola Norm. Scienze (to appear), arXiv:1905.09366.
2. D.Agostini, C. Améndola. *Discrete Gaussian distributions and theta functions*, SIAGA, vol. 3 (2019), 1-30.
3. D.Agostini, A. Küronya, V. Lozovanu. *Higher syzygies on surfaces with numerically trivial canonical bundle*, Math. Zeit., vol 293 (2019), 1071-1084.
4. D.Agostini. *A note on homogeneous ideals of polarized abelian surfaces*, Bull. London Math. Soc., vol. 49 (2017), 220-225.
5. D.Agostini, D. Alberelli, F. Grande, P. Lella. *The maximum likelihood degree of Fermat hypersurfaces*, Journal of Algebraic Statistics, vol. 6 (2015), 108-132.

## PREPRINTS

1. D. Agostini, T. O. Çelik, J. Struwe, B. Sturmfels. *Theta surfaces*, arXiv:2001.11385.
2. D. Agostini. *On the Prym map for cyclic covers of genus two curves*, arXiv:2001.06264.
3. D.Agostini, L.Chua. *Computing Theta Functions with Julia*, arXiv:1906.06507.
4. D.Agostini, C. Améndola, K. Ranestad. *Moment identifiability of homoscedastic Gaussian mixtures*, arXiv:1905.05141.
5. D.Agostini. *Asymptotic syzygies and higher order embeddings*, arXiv:1706.03508.

## INVITED TALKS AT WORKSHOPS AND CONFERENCES

- September 7 - 11, 2020:** *Riposte Armonie: algebraic geometry together with Ciro Ciliberto*, Ventotene.
- August 26 - 28, 2020:** *A workshop on abelian varieties*, Roma.
- July 13 - 16, 2020:** *International Congress on Mathematical Software*, Braunschweig.
- October 7 - October 11, 2019:** *Algebraic Geometry+ Workshop*, Berlin.
- April 15 - 19, 2019:** *Rationality of algebraic varieties*, Schiermonnikoog.
- May 29 - June 1, 2018:** *Giornate di Geometria Algebrica ed Argomenti Correlati XIV*, Genova.
- December 22, 2016:** *Algebraic Geometry and Representation Theory in Rome*, Roma.

## INVITED SEMINAR TALKS

- February 19, 2020:** *Seminari di Geometria*, Università di Roma "La Sapienza", Roma.
- December 9, 2019:** *Algebra Oberseminar*, TU Berlin.
- May 15, 2019:** *Algebraic Geometry and Moduli Seminar*, ETH Zürich.

**February 28, 2019:** Geometry, Physics, and Representation Theory Seminar, Northeastern University.

**January 31, 2019:** Algebraic Geometry Seminar, University of Oslo.

**December 18, 2018:** Séminaire de Géométrie Algébrique, Université de Lille.

**December 14, 2018:** Statistics Seminar, Humboldt Universität Berlin.

**December 11, 2018:** Obseminar Institut für Algebra und Geometrie, Otto-von-Guericke-Universität Magdeburg.

**November 12, 2018:** Oberseminar Differentialgeometrie, Albert-Ludwigs-Universität Freiburg.

**October 29, 2018:** Seminario di Geometria, Università Roma Tre, Roma.

**October 17, 2018:** Algebraic Geometry seminar, Humboldt-Universität zu Berlin.

**May 27:** Seminario di Geometria Algebrica, Università di Firenze.

**April 2, 2018:** Statistics Seminar, Institute of Statistical Mathematics, Tokyo.

**April 2, 2018:** Statistics Seminar, Tokyo University.

**March 9, 2018:** Algebraic Statistics Meeting, Kobe University.

**January 30, 2018:** Oberseminar Algebra and Number Theory, Universität Augsburg.

**October 16, 2017:** Algebraic Geometry Seminar, Stony Brook University.

**July 18, 2017:** Research Seminar in Algebraic Geometry, Philipps Universität Marburg.

**February 20, 2017:** Research Seminar in Algebraic Geometry, Leibniz Universität Hannover.

**September 3, 2016:** IRTG 1800 Student Conference, Universiteit Leiden.

**July 5, 2016:** GAGA Seminar, Universiteit Utrecht.

**June 17, 2016:** Séminaire de Théorie des Nombres, Université du Caen.

**January 28, 2015:** Research Seminar in Algebraic Geometry, Humboldt Universität zu Berlin.

**July 22, 2014:** Research Seminar in Algebraic Geometry, Universität des Saarlandes, Saarbrücken.

#### OTHER TALKS AND POSTER PRESENTATIONS

**September 24-28, 2018:** short talk at the *Summer school in Algebraic Statistics*, University of Tromsø, Tromsø.

**July 17, 2018:** Short talk at *Classical Algebraic Geometry*, Oberwolfach.

**October 14, 2017:** Poster at *AGNES*, Northeastern University.

**September 7, 2017:** Poster at the *School (and Workshop) on Syzygies*, Trento.

#### VISITS

**March 2020:** Visiting Prof. Bernard Deconinck at the University of Washington, Seattle.

**October - December, 2017:** Visiting Prof. Robert Lazarsfeld at Stony Brook University.

**April - September, 2016:** Visiting Student at the Universiteit Utrecht, Utrecht, under the supervision of Prof. Dr. Carel Faber.

**April - July, 2014:** Visiting Student at the Universität des Saarlandes, Saarbrücken, under the supervision of Prof. Dr. Frank-Olaf Schreyer.

#### ORGANIZATIONAL ACTIVITIES

**September 30 - October 4, 2019:** Organizer of the Fall School Algebraic Geometry+ in Berlin.

**July 9 -10, 2019:** Organizer of a minisymposium on Riemann Surfaces at the SIAM Applied Algebraic Geometry conference in Bern.

**February 17 -19, 2016 :** Organizer of the *4th BMS Student Conference* at the TU Berlin.

#### TEACHING ACTIVITY

**Winter semester 2019-2020:** Teaching assistant for the course *Linear Algebra I*, at the Humboldt-Universität zu Berlin. Instructor: Prof. Dr. Bruno Klingler.

**Summer semester 2019:** Teacher of the course *Algebraic Number Theory*, at the Humboldt-Universität zu Berlin. This course was voted by the students as the second best in the whole department.

**Winter semester 2018-2019:** Teaching assistant for the course *Analysis I*, at the Humboldt-Universität zu Berlin. Instructor: Dr. Alexander Fauck.

**2016-2017:** Helper for the course *Algebraic Geometry II*, at the Humboldt-Universität zu Berlin. Instructor: Dr. Frank Gounelas.

**2012-2013:** Tutor for the course *Algebra 1*, at the University of Pisa. Instructor: Prof. Ilaria del Corso.

#### OTHER ACTIVITIES

**January 2015 - present :** Organizer of the Student Seminar in Algebraic Geometry at the Humboldt-Universität zu Berlin.

**January - December, 2015:** Student representative for the Berlin Mathematical School.

**November 10 - 30, 2012:** Popularization activities within the exhibit *Poliedri in Pezzi*, Pisa, Italy.

#### LANGUAGE SKILLS

Italian: native speaker.

English: very good, both written and spoken.

German: basic.

#### COMPUTER SKILLS

Macaulay2, Julia, Python.