

Liena Colarte Gómez

EDUCATION

PhD in Algebraic Geometry

Universitat de Barcelona

Advisor: Professor Rosa Maria Miró-Roig.

2018-2022

Master in Advance Mathematics

Universitat de Barcelona

Final Master Project defended on July 12th of 2018: *GT-varieties*. Advisor: Professor Rosa Maria Miró-Roig.

2017-2018

Bachelor degree in Mathematics

Universitat de Barcelona

Final Degree Project defended on January 30th of 2017: *The Schur functors and the resolution of determinantal varieties*. Advisor: Professor Rosa Maria Miró-Roig.

2011 - 2017

PUBLICATIONS

3. L. Colarte, E. Mezzetti, RM. Miró-roig and M. Salat, "On the coefficients of the permanent and the determinant of a circulant matrix. Applications.", *Proceedings of the American Mathematical Society* **147**, 547–558 (2019).
2. L. Colarte and RM. Miró-roig, "Minimal set of binomial generators for certain Veronese 3-fold projections.", *Submitted to JPAA* , (2019).
1. L. Colarte E. Mezzetti and RM. Miró-roig, "On the Cohen-Macaulayness of Togliatti systems.", *Preprint* , (2019).

STAYS

January 15th - April 15th of 2019.

Predoctoral stay in Universita' degli studi di Trieste, Dipartimento di Matematica e Geoscienze. Via Valerio 12/1 - 34127 Trieste, Italia. Host: Professor Emilia Mezzetti (mezzette@units.it).

WORK EXPERIENCE

Predoctoral researcher position, 2018 - 2022. Universitat de Barcelona. Departament de Matemàtiques i Informàtica.

- Teaching experience in Linear Algebra for bachelor degree in Informatics. Fall term 2018.

MERITS

PhD scholarship for the period 2018 - 2022. Won within spanish competition. Awarding institution: Spanish Government.

CONFERENCES AND WORKSHOPS ATTENDED

5. ARCADES Doctoral School II and ESR Days in Barcelona, Universitat de Barcelona, September 3rd - 7th of 2018
4. Lefschetz Properties and Jordan Type in Algebra, Geometry and Combinatorics, Centro Internazionale per la Ricerca Matematica (CIRM) Levico Terme (Italy), June 25th - 29th of 2018
3. Workshop on Complex Algebraic Geometry – Pirola 60th, Universitat de Barcelona, February 5th - 9th of 2018
2. Third Meeting of the RGAS network, Universidad Complutense de Madrid, January 2nd - 29th of 2018
1. BMS-BGSMath Junior Meeting, Barcelona Graduate School of Mathematics (BGSMath), October 9th - 10th of 2017

TALKS

3. Special course on binomial ideals., SIMBA Junior Week of Mathematics 2018, December 17th - 21st of 2018 <https://sites.google.com/view/jwmathbarcelona/home>
2. La resolución de las variedades determinantales II, Seminari Informal de Matemàtiques de Barcelona (SIMBA), May 6th of 2018
1. La resolución de las variedades determinantales I, SIMBA, April 25th of 2018

ACTIVITIES

- Co-organizer of Seminari Informal de Matemàtiques de Barcelona. <http://www.ub.edu/simba/en/index.html>.
- Co-organizer of SIMBA Junior Week of Mathematics 2018 <https://sites.google.com/view/jwmathbarcelona/home>

SKILLS

Languages

- *Spanish* Fluent

- *Catalan* Fluent
- *English* Upper intermediate
- *Italian* Intermediate

Computation skills

- C and C++
- LaTeX
- Wolfram Mathematica and Macaulay2

