CURRICULUM VITÆ

Name: BAZZOTTI, Laura
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EDUCATION

Undergraduate studies (Diploma)

Software programmer at Technical Institute "Rosselli" at Genoa (July 91) final mark 60/60.

Laurea (Master's Degree)

Master's degree in Applied Mathematics at the University of Genoa (July, 1997) 110/110 with honours. Thesis: *Dimostrazione automatizzata dei teoremi di geometria elementare: metodo delle Basi di Gröbner*, (Automatic theorem proving in elementary geometry using Gröbner Bases), advisor Prof. Lorenzo Robbiano. Some results have been published [1]. The thesis has been divided in two parts: the theoretical one, centered on the Gröbner Bases, and the other one on the development of a software package based on the obtained results. The package "thmproving.cpkg" is officially part of CoCoA and is available at `http://cocoa.dima.unige.it/download/packages/`

Phd

Phd in Mathematics at the University of Florence (March, 2003) Thesis: *Conduttore di schemi zero-dimensionali*, (Conductors of zero-dimensional schemes), advisor Prof. Anthony V. Geramita (Queen's University & University of Genoa). Some results have been published [2]. With the regards to Phd-thesis, I realized a software package for computation of conductors of zero-dimensional schemes, "conductor.cpkg", officially belonging to CoCoA and available at `http://cocoa.dima.unige.it/download/packages/`

Software knowledge

Programming languages: Pascal, C, HTML on operating systems Unix, Linux, Windows, Macintosh.

Computer Algebra Systems: Derive, Mathematics, MATLAB, CoCoA, Singular, Macaulay.

Languages: English (standard level), French (fluently).

EMPLOYMENT

Research activity

I have worked on Geometric Theorem Proving and the results of this research are published in the paper "Remarks on Geometric Theorem Proving" (Bazzotti-Dalzotto-Robbiano), which was presented at "Third International Workshop on Automated Deduction in Geometry" (Zurigo, 25–27 September 2000) and at AMS-UMI meeting in Pisa (12–16 June 2002). Under the direction of

Prof. Anthony V. Geramita, I worked on problems about zero-dimensional schemes and I studied the conductor sequence and the length of the conductor of a set of points in projective space.

Current Position From September 2000 official professor of mathematics for Italian high school, actually at Liceo Scientifico annesso al Convitto Colombo (Genova)
From 2022 Professor of the teaching Mathematics in MARITIME SCIENCE AND TECHNOLOGY (DITEN)

EXPERIENCES ABROAD

Visitor at the Queen's University, (Kingston, Ontario, Canada) August – December 2000.
Visitor at the Queen's University, (Kingston, Ontario, Canada) July 2001.
Visitor at the Queen's University, (Kingston, Ontario, Canada) July – October 2002.
Visitor at the University of Barcellona in November 2003.

TALKS

Conduttori di Punti, Politecnico di Torino, March 2002.

On the Conductor of Points in $\mathbb{P}^n$, Annual Rt. 81 Meeting on Commutative Algebra (26–28 October 2002), Queen's University (Kingston, Ontario).

Minimal Conductor of Points in $\mathbb{P}^2$, AMS Meeting (9–10 November 2002), Orlando, Florida.

The Conductor of Finite Sets of Points, Workshop on "Zero-dimensional schemes and related topics" (13–15 February 2003) Dipartimento di Matematica, Politecnico di Torino.

SUMMER SCHOOL AND CONFERENCES

1. "Scuola Estiva di Alta Matematica CEM 1998", (27 July – 31 August 1998) Perugia.
2. "Scuola Internazionale di Algebra Computazionale" (31 May – 3 June 1999) Villa Gualino, Torino.
3. "Pragmatic 2000" (7–23 June 2000) Università di Catania.
4. "Scuola Internazionale di Algebra Computazionale" (16–19 July 2001) Queen's University, Kingston, Ontario, Canada.
5. "Trends in Algebraic Geometry and Applications"(15–17 December 1998) Istituto Trentino di Cultura, Povo, Trento.
6. "COCOA VI Conference" (3–5 June 1999, Villa Gualino, Torino)
7. "Rt. 81 Conference" (10–12 November 2000) Cornell University, Ithaca, U.S.A.

8. "COCOA VII Conference" (19–21 July 2001) Queen's University, Kingston, Ontario, Canada.

9. "Conference on Zero dimensional schemes and related topics" (6–8 June 2002) Acireale, Catania.

10. "AMS-UMI meeting" (12–16 June 2002) Pisa.

11. "Workshop on Zero-dimensional Schemes" (13–15 February 2003) Politecnico di Torino.

PUBBLICAZIONI

[1] Bazzotti, Dalzotto, Robbiano: **Remarks on Geometric Theorem Proving**.
Proceedings of ADG 2000, Springer's LNAI 2061, pp. 104-128 (2001).

[2] Abrescia, Bazzotti, Marino: **Conductor degree and Socle degree**
Le Matematiche, Vol. LVI-Fasc.I, pp.129-148 (2001).

[3] Bazzotti: **Conduttore di schemi zero-dimensionali**
Tesi di Dottorato (2003)

[4] Bazzotti: **Sets of Points and Their Conductor**
J.Algebra 283, pp.799-820 (2005).

[5] Bazzotti, Casanellas: **Separators of Points on Algebraic Surfaces**
J. Pure and Applied Algebra 207, pp.319-326 (2006)