

# Ornella Greco

## Curriculum Vitae

### Personal Information

Full name: Ornella, GRECO.  
Address: Department of Mathematics, KTH, 10044, Lindstedtsvägen 25, Stockholm, Sweden.  
E-mail: [ogreco@kth.se](mailto:ogreco@kth.se).  
Number: +46 08-7906663.  
Website: <http://www.math.kth.se/~ogreco>

### Professional Status and Current Position

2010–Present **Ph.D. student and Teaching Assistant**, *Royal Institute of Technology (KTH), Stockholm*, My supervisor is Prof. Mats Boij, my second supervisor is Prof. Sandra Di Rocco. I expect to gain my doctoral degree on **February 4-th, 2015**.

### Education

Nov 2013 **Licentiate Degree ('Half PhD Degree')**, *KTH, Stockholm, Sweden*.  
*Supervisor*: Prof. M. Boij; *Opponent*: Prof. A. Conca; *Title*: Bounds on Hilbert Functions.  
July 2010 **Master Degree in Mathematics**, *University of Catania, Catania, Italy*.  
*Mark*: 110/110 cum laude, *supervisors*: Prof. M. D'Anna, Prof. R. Fröberg, Prof. C. Gottlieb;  
*Title*: Unique and non unique factorization rings.  
July 2008 **Bachelor Degree in Mathematics**, *University of Catania, Catania, Italy*.  
*Mark*: 110/110 cum laude, *supervisors*: Prof. M. D'Anna; *Title*: Basi di Gröbner e Teoria dell'eliminazione.

### Grants and Awards

2012-2014 Recipient of the G. S. Magnuson travel grant.  
2011 Recipient of K. and A. Wallenberg travel grant.  
2010 Recipient of the Swedish Institute scholarship for master students.

### Other relevant academic experiences

2014 Member of the committee for upgrading researchers to lecture positions at the Royal Institute of Technology (Sweden).  
2013 Co-organizer of the *ETAM* Conference in Catania, financed by the Royal Institute of Technology (Sweden) and Aalto University (Finland).  
2012 From October to December 2012, **Program associate at the MSRI**, Mathematical Sciences Research Institute, Berkeley, USA.  
2011 Co-organizer of the *After Pragmatic* Conference in Stockholm, financed by Stockholm University (Sweden).

## Scientific Production

### Preprints

- 6) *Computations of Betti numbers of Pinched Veronese Rings*, in preparation.
- 5) *Factorization of a non-zero polynomial over an Artinian, local, principal ideal ring*;
- 4) *Equivalence of three different definitions of irreducible element*

### Submitted preprints

- 3) *Syzygies of the Veronese Modules*, joint work with I. Martino; submitted.
- 2) *Green's Hyperplane restriction theorem: an extension to modules*, preliminary accepted to Journal of Pure and Applied Algebra.

### Published articles

- 1) *The h-vector of the union of two sets of points in the projective plane*, with M. Mateev and C. Söger, published in *Matematiche (Catania)* 67 (2012), no. 1;

### Other

- i) (*Licentiate thesis*) *Bounds on Hilbert functions*;
- ii) (*Master thesis*), *Unique and non-unique factorizations in commutative rings*;
- iii) (*Bachelor thesis*), *Basi di Gröbner e teoria dell'eliminazione*.

## Teaching

I have a positions as **Teaching Assistant** at the Royal Institute of Technology (KTH): My teaching load is about *three courses per year*. This is the list of the courses I have taught:

- *Spring 2011*, exercise session for the course *Groups and Rings*;
- *Fall 2011*, exercise session for the course *Homological Algebra and Algebraic Topology*;
- *Spring 2012*, exercise session for the course *Groups and Rings*;
- *Spring 2012*, exercise session for the course *Algebra och geometri*;
- *Spring 2012*, exercise session for the course *Flera variabler*;
- *Fall 2013*, exercise session for the course *Algebra och geometri*;
- *Spring 2014*, exercise session for the course *Algebra och geometri*.

## Given Talks

- *May 2014*: *Syzygies of the Veronese modules*, at Stockholm University, Sweden;
- *May 2014*: *Syzygies of the Veronese modules*, at Uppsala University, Sweden;
- *March 2014*: *Syzygies of the Veronese modules*, at Aalto University, Helsinki, Finland;
- *February 2013*: *Macaulay's Theorem and Green's Theorem: Extensions to Modules*, at ETAM (Etna Triangulation and Algebra Meeting), in Catania, Italy;
- *November 2012*: *Green's Hyperplane Restriction Theorem*, at the Program Associate seminar, at MSRI (Berkeley), USA;
- *June 2012*: *Survey on the Macaulay's Theorem, on the Green's Hyperplane Restrictions Theorem, and their extensions* at the Small Talk seminar, in Stockholm, Sweden;
- *December 2011*: *The h-vector of the union of two sets of points in the projective plane* at the After Pragmatic Conference, Stockholm University, Sweden;
- *November 2011*: *The h-vector of the union of two sets of points in the projective plane* at the Svenska matematikersamfundets fall meeting, in Linköping Sweden.

## Scientific activities

- *September 2014*: INdAM meeting: International meeting on numerical semigroups, Cortona, Italy;
- *June 2013*: EACA summer school, Valladolid, Spain;
- *June 2013*: CoCoA school 2013, Osnabrück, Germany;
- *May 2013*: Syzygies in Berlin, Germany;

- *February 2013*: ETAM (Etna Triangulation and Algebra Meeting), in Catania, Italy;
- *December 2012*: Workshop "Combinatorial Commutative Algebra and Applications ", at MSRI (Berkeley), USA;
- *October-December 2012*: MSRI, Commutative Algebra Program, Berkeley, USA;
- *June-July 2011*: Pragmatic 2011, Catania, Italy;
- *August 2008*: SMI, Perugia, Italy.

## Computer skills

Good use of Windows and Linux; good use of Office professional; very good use of Latex; good knowledge C++, Matlab, Maple, Macaulay 2 and Html.