Carlo Sircana

Contact Information

E-mail	sircana@student.dm.unipi.it
Telephone	+39 331 5386827
Address	Via Monte Rosa 1, Olbia (OT), 07026, Italy
Nationality	Italian
Birth	12/23/1992, in Olbia (SS), Italy

Education

2014 - 2016   **Graduate Student in Pure Mathematics**, *Università di Pisa*, Pisa, Master degree in Mathematics, 110/110 cum laude, 9/16/2016.

Dissertation Topic: In the thesis, we deal with the problem of factoring polynomial over quotient rings of integers. This topic is strictly linked to the study of p-adic factorization and algorithms to compute the ring of integers of a number field. In particular, in the thesis we find some relations between normality of the order generated by a root of a polynomial over the p-adic and irreducibility in $\mathbb{Z}/p^k\mathbb{Z}$.
Advisor: Prof. Patrizia Gianni

2011/12 - 2014/15   **Bachelor Student in Pure Mathematics**, *Università di Pisa*, Pisa, Bachelor Degree in Mathematics, 110/110 cum laude, 9/19/2014.

Bachelor Dissertation: "Il teorema di Quillen-Suslin" (Quillen-Suslin Theorem).
Dissertation Topic: The Quillen-Suslin theorem solves the problem of understanding if a finite projective module over a polynomial ring is free, which is equivalent to say that every locally free sheaf of modules over the affine space over a field is free. In the thesis, we studied some of the existing proofs, focusing on their algorithmic aspects, and the constructive methods developed by Sturmfels and Logar to find a free set of generators of a projective module.
Advisor: Prof. Patrizia Gianni

2005/06 - 2010/11   **High School Student**, *Scientific Lyceum Lorenzo Mossa*, Olbia (OT), High School Diploma, 110/100 cum laude, July 2011.

Experience

October–December 2015	**Tutor for the Algebra Course**. I was chosen as a tutor of the course of Algebra (Master Degree)

Skills

Language skills

Italian	Mother tongue
English	Advanced, Certificate of Advanced English (CAE)

Computer skills

C	Intermediate
Octave	Intermediate
Fortran	Intermediate
LaTeX	Intermediate
OCaml	Basic
Sage	Basic
Singular	Basic