

Vincenzo Pallozzi

Lavorante

Curriculum Vitae

Position

- 2018–2021 **PhD student in Mathematics**, *UNIVERSITÀ DEGLI STUDI DI MODENA E REGGIO EMILIA*, Italia.
Supervisor Prof. Massimo Giulietti
- 07–12/2021 **Visiting PhD Student**, *UNIVERSITY OF SOUTH FLORIDA*, Tampa, Florida.
Supervisor Prof. Xiang-Dong Hou
- 2019–2020 **Visiting PhD student**, *UNIVERSITÀ DELLA BASILICATA*, Italia.
Supervisor Prof. Gábor Korchmáros

Education

- 2016–2018 **Master's Degree in Mathematics, general Curriculum**, *UNIVERSITÀ DEGLI STUDI DI PERUGIA*, Italia, *110/110 cum laude*, **GPA: 30.00/30.00**.
- 2013–2016 **Bachelor's degree in Mathematics**, *UNIVERSITÀ DEGLI STUDI DI PERUGIA*, Italia, *110/110 cum laude*.
- 2008–2013 **Experimental scientific maturity**, *Scientific high school P.N.I. (Piano nazionale di informatica)*, ISTITUTO GALILEO GALILEI, Perugia (PG), 98/100.

Thesis

Master's Thesis

- Title ***One-Point codes from BM curves***
- Supervisors Prof. Massimo Giulietti
- Description Study of some Weierstrass Point of the BM curves; complete characterization of Weierstrass semigroups of two short orbits; Construction of AG and Quantum codes; Determination of Frobenius dimension of the BM curves.

Bachelor's Thesis

- Title ***Monomial Ideal***
- Supervisors Prof. Anna Lorenzini
- Description Complete characterization of monomial ideals, uniqueness of a particular type of minimal primary decomposition; monomial modules of finite type and characterization of monomial syzygies.

Areas of interest

Permutation polynomials, algebraic curves over finite fields, coding theory, finite group theory.

Activities

Didactics

2020–2021 **"Cultore della Materia"**, *UNIVERSITÀ DEGLI STUDI DI PERUGIA, Dipartimento di Scienze Farmaceutiche, corso di laurea in Chimica e Tecniche Farmaceutiche*, Italia.

Didactics and activities with supervisor Prof. Fernanda Pambianco.

2018–2019 **Tutor of "Geometry and algebra"**, *UNIVERSITÀ DEGLI STUDI DI PERUGIA*, Dip. di Ingegneria.

Supervisor: Prof. Fernanda Pambianco

2016–2018 **Tutor of "Numerical Analysis"**, *UNIVERSITÀ DEGLI STUDI DI PERUGIA*, Italia.

Supervisor: Prof. Bruno Iannazzo

Grants, Honours and Awards

2019 **Premio di Laurea in memoria del Prof. Stefano Guazzone**, *Università degli studi di Perugia*, Italia.

<http://www.dmi.unipg.it/dipartimento/news/338-cerimonia-di-assegnazione-premi-di-laurea>

2018–2021 **PhD scholarship**, *UNIVERSITÀ DEGLI STUDI DI MODENA E REGGIO EMILIA*, Italy.

Talks

2019 **AG codes from the second generalization of the GK maximal curve**, *9th Slovenian International Conference on Graph Theory*, Bled.

Conference and Workshop

23 June–29 June 2019 **9th Slovenian International Conference on Graph Theory**, *Institute of Mathematics, Physics and Mechanics*, Bled.

<https://conferences.matheo.si/event/28/overview>

September 2108–June 2019 **Discrete Mathematics Seminars**, *UNIVERSITÀ DI BRESCIA, MODENA E REGGIO EMILIA and VERONA*, Italia.

2019 Monthly seminars on Discrete Mathematics

22 July–16 August 2018 **SMI (Scuola Matematica Interuniversitaria)**, *UNIVERSITY OF PERUGIA*, Italia.

Attended the courses held by Juan Migliore (Univ. of Notre Dame, IN) "Commutative algebra and Geometry" and Francois Berteloot (Univ. of Toulouse, FR) "Complex Analysis"

Miscellaneous

2013 Finalist at Cesenatico in the "Italian Mathematical Olympics", team games

2012 Finalist in Perugia for the "Matematica e Realtà" project

Publications

- 2019 **AG codes from the second generalization of the GK maximal curve**, *Montanucci M. and Pallozzi Lavorante V.*, Discrete Mathematics, Volume 343, Issue 5, 2020, 111810, ISSN 0012-365X, <https://doi.org/10.1016/j.disc.2020.111810>.
- 2021 **External points to a conic from a Baer subplane**, *Pallozzi Lavorante V.*, submitted, <https://arxiv.org/abs/2104.12434>.
- 2021 **New hemisystems of the Hermitian surface**, *Pallozzi Lavorante V., Smaldore V.*, <https://arxiv.org/abs/2105.09656>.
- 2021 **New families of permutation trinomials constructed by permutations of μ_{q+1}** , *Pallozzi Lavorante V.*, <https://arxiv.org/abs/2105.12012>.

Computer skills

Basic Python, CoCoA
Intermediate C, Wolfram Mathematica, Magma
Advanced L^AT_EX

Language

Italian Mother tongue
English C1