

## Riccardo Pengo

PhD student at the University of Copenhagen

Born in Milan, Italy on December 21st, 1993

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### Languages -

Spanish ~ CEFR level B1

English ~ CEFR level C1

Italian ~ Native speaker

# Computer skills —

**E**TEX

Linux

**SAGE** 

PARI-GP

Python

Matlab<sup>®</sup>

Education

2017-PhD in Mathematics EQF level 8

University of Copenhagen (KU)

2015-2017 M.Sc. cum laude in Mathematics EOF level 7

ALGANT Master | University of Milan & Leiden University

2012-2015 B.Sc. summa cum laude in Mathematics EQF level 6

University of Milan | GPA: 29.47/30

2007-2012 Upper secondary education diploma EQF level 4

Liceo Scientifico "A. Einstein", Milan | Final Grade: 100/100

Teaching

Fall 2016 Teaching assistantship University

"Mathematics for Statisticians" | Leiden University

2012-2016 Private tutoring for high school students High school

Liceo Scientifico "A. Einstein" and others | Milan

Scholarships

2017-2020 Full PhD stipend 3 years

University of Copenhagen (KU)

2016-2017 **ERASMUS Scholarship** 10 months, €2400

University of Milan

2012-2015 INdAM Scholarship for Undergraduate Students 3 years, €12000

University of Milan

Project works

**ALGANT Master thesis** Feb. - Aug. 2017 Number theory

"An adelic description of modular curves" | Advised by Peter Bruin in

Leiden University

July 2016 Algebraic Surfaces seminar Geometry

"Surfaces with zero Kodaira dimension" | University of Milan

July 2016 Homological Algebra seminar Algebra

"Group cohomology and the Mordell-Weil theorem" | University of

Milan

June 2016 Number Theory seminar Number theory

"Ramification and the different ideal" | University of Milan

Dec. 2015 Commutative Algebra seminar Algebra

"Axiomatic definition of the Krull dimension" | University of Milan

July 2015 Final Bachelor Degree seminar

"Algebraic integers: euclidean domains and rings of integers" | Uni-

versity of Milan

#### Schools and conferences attended

27.08.17 - 02.09.17 Summer school on Modular Forms Summer school

Padova, Italy

17.07.17 - 19.07.17 Where Geometry meets Number Theory Conference

Göteborg, Sweden

Aug. 2014 INdAM Bachelor Summer School Summer school

Perugia, Italy

Aug. 2013 INdAM Bachelor Summer School Summer school

Perugia, Italy

#### Additional information

2017-	Experience as an amateur actor "Leiden English Freshers", Leiden	Theatre
2013-2016	Experience as an amateur improvisational theatre actor "Teatro del Vigentino", Milan	Theatre
2014-2016	Student reprensentative University of Milan, Department of Mathematics	Politics

### Brief outline of my PhD project

During my PhD project I will try to find relationships between heights and special values of L-functions. I will try in particular to find explicit relationships between the Mahler measure of a polynomial, which tells us how "big" the polynomial is, and linear combinations of special values attained by the derivative of an L-function. L-functions are Dirichlet series which can be attached to many kinds of objects. The challenge here will be, given a polynomial, to understand which object we need to consider in order to obtain the identity that we are looking for.

I am working under the supervision of Ian Kiming and Fabien Pazuki.