

# Cristina Tagliaferri

## *Curriculum Vitae*



### Personal Data

Full Name Cristina Tagliaferri  
Date of Birth 19th December 1994  
Place of Birth Anagni (FR)  
Nationality Italian  
Email tagliaferri@mat.uniroma1.it

### Current Position

2018–today **PhD student in Mathematics XXXIV ciclo**, "*La Sapienza - University of Rome*", Rome, Italy.  
Advisor: Professor Alessandra Faggionato.

### Education

2016–2018 **Master's Degree in Mathematics**, "*La Sapienza - University of Rome*", Rome, Italy.  
Final mark: 110/110 cum laude.  
February **Erasmus+**, *Universidad de Granada*, Granada, Spain.  
2016–June 2016  
2013–2016 **Bachelor's Degree in Mathematics**, "*La Sapienza - University of Rome*", Rome, Italy.  
Final mark: 110/110.  
2008–2013 **High school graduate**, *Liceo Scientifico Francesco Severi*, Frosinone, Italy.  
Final mark: 95/100.

### Theses

#### Master's Thesis

Title *Interplay between large deviation principle and central limit theorem in stochastic thermodynamics*  
Supervisor Professor Alessandra Faggionato

Description Given a stochastic process with Gaussian fluctuations, we are interested to provide some bounds on the variance  $\sigma^2$ . In order to do this we have studied large deviation theory and we have looked at that processes satisfying a large deviation principle with some rate function  $I$ . We have seen that there is an explicit relation between  $I$  and  $\sigma^2$ .

### Bachelor's Thesis

Title *La matematica dei flat origami* (The mathematics of flat origami)

Supervisor Professor Luigi Orsina

Description In this thesis we have provided a description of the origami as a mathematical object. Moreover we have studied the problem of flat foldability in origami with one vertex and more than one vertex.

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## Extra-Curricular Training

12-16 April 2021 **Recent Progress on Random Walks**, *Virtual Conference*, CIRM.

The study of random walks has been a central topic in modern probability theory for the last three decades. A lot of techniques have been developed in order to analyse their short and long term behaviour. The meeting will gather leading experts in this field as well as younger promising researchers. The goal is to discuss recent progress and open questions.

24-28 February 2020 **3rd Haifa Probability School**, *Technion*, Haifa, Israel.

The 3rd Haifa Probability School focused on: random planar maps and random graphs, integrable probability, stochastic partial differential equations and the KPZ universality, random high dimensional geometric/topological structures.

8-19 July 2019 **Nice summer school on random walks and complex networks**, *University of Nice Sophia Antipolis*, Nice, France.

The aim of this summer school is to explain concepts on random walks and random models for complex networks.

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## Computer Skills

C, C++, MATLAB, Fortran,  $\LaTeX$ , Microsoft Office tools.

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## Languages

Italian Mother tongue

English Good

Spanish Fluent

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## Working Experiences

2020 **Teaching assistant "Probability"** for Department of Economics and Finance, *LUISS Guido Carli*, Rome.

2016-2017 **Assistant at Library of Department of Mathematics "Guido Castelnuovo"**, *University of Rome La Sapienza*, Rome.

2014-2015 **Assistant at Computer Center and Labs of Department of Mathematics "Guido Castelnuovo"**, *University of Rome La Sapienza*, Rome.

## Affiliations and Memberships

2018 **CDO - Centro Diffusione Origami**, Italy, member.

2017 **Emergency**, Italy, member.