#### Contact

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### Education

2020-present	Doctoral student at IMAR
2017–2019	Master Degree, University of Bucharest, Faculty of Mathematics and Computer Science, program name: Algebra, Geometry and Cryptography.  Dissertation: Formula de urmă Selberg (The Selberg trace formula) — supervised by Dr. Sergiu Moroianu
	Master student at S.N.S.B.
2016-2017	First year student at S.N.S.B. in the preliminary cycle.
2014-2017	Bachelor's Degree, University of Bucharest, Faculty of Mathematics and Computer Science, with average grade 10.  Bachelor Thesis: Spectrul lungimilor geodezicelor simple pe toruri hiperbolice punctate (The spectrum of simple geodesics on hyperbolic punctured tori) – supervised by Dr. Sergiu Moroianu.
2010–2014	Bacalaureat at "Tudor Vianu" National High School of Computer Science.

# Work Experience

2017 – 2020	Member in the Research Grant 0330/2017 "Volumul varietăților hiperbo-
	lice şi Einstein".

### **Publications**

- Cipriana Anghel, Rares Stan, The importance of the adjoint matrix in some contest type problems, Gazeta Matematică, anul CXIX, nr. 4/2014 (in romanian);
- Cipriana Anghel, Rares Stan, *Uniformization of Riemann surfaces revisited*, pre-print: https://arxiv.org/abs/2008.12189.

#### Talks in Conferences

Combinatorial Riemann-Roch, chip-firing games and the discrete logarithm in cryptography, joint with Cipriana Anghel, Tomorrow's mathematicians today, University of York.

### Conferences

Participation at the  $6^{th}$  **Heidelberg Laureate Forum**, Heidelberg, Germany.

### **Summer School**

2018	Participation at the Master classe "Surfaces", Marseille.
2015	Participation at the Modern Mathematical International Summer
	School, Jacobs University, Bremen.

### Talks in seminars

The Identity of Basmajian and some applications, Geometry Seminar, Institute of Mathematics of the Romanian Academy.

### Honors and Awards

2015-2019	Merit scholarship from the University of Bucharest.
2015-2016	Anghelescu scholarship.
2014-2015	Study scholarship from the University of Bucharest.

# Results at mathematical competitions

2015-2016	Silver medal at SEEMOUS, Potaras, Cyprus.
2014-2015	Bronze medal at SEEMOUS international competition, Ohrid, Republic of Macedonia.
2014-2015	Bronze medal at IMC, Blagoevgrad, Bulgaria.
2013-2014	Gold medal at the National Mathematical Olympiad.
2012-2013	Bronze medal at the National Mathematical Olympiad.
2010-2011	Silver Medal at the National Mathematical Olympiad.

# Languages

 $\bullet$  Romanian: native.

• English: fluent.

### Scientific activity

During the third year of undergraduate studies I worked for my Bachelor Thesis named "The spectrum of lengths of geodesics on hyperbolic punctured tori". The purpose of my thesis was to understand and rewrite in my own way the proof of the identities of Basmajian and McShane. In order to understand the proofs, I have learned basic notions of riemannian geometry and hyperbolic geometry.

My studies continued with the master program, where apart from the regular courses, I have also worked to understand The uniformization theorem for Riemann sufaces and The Selberg trace formula. For these theorems, I have learned notions of complex analysis, harmonic functions and functional analysis.