

Yuriy Tumarkin

Curriculum Vitae

Trinity College
CB2 1TQ
Cambridge, UK
✉ yt354@cam.ac.uk

Education

2021–2022 **MMath**, *Part III of the Mathematical Tripos*, University of Cambridge.

2018–2021 **Mathematics B.A.**, Trinity College, University of Cambridge,
First Class Honours, 78%, rank 32/222.

Courses taken:

First-year courses:

Groups
Analysis I
Numbers & Sets
Probability
Vector Calculus
Vectors & Matrices
Differential Equations
Dynamics & Relativity

Second-year courses:

Groups, Rings & Modules
Analysis & Topology
Metric & Topological Spaces
Complex Analysis
Geometry
Linear Algebra
Variational Principles
Mathematical Methods
Markov Chains
Statistics
Fluid Dynamics
Electromagnetism
Quantum Mechanics

Third-year courses:

Algebraic Topology
Riemann Surfaces
Differential Geometry
Dynamical Systems
Representation Theory
Algebraic Geometry
Galois Theory
Number Fields
Probability & Measure
Quantum Information & Computation
Number Theory
Graph Theory

2012–2018 **Secondary School**, *Durham Johnston Comprehensive School, Durham, UK*,
A levels: 5 A* (Maths, Further Maths, Physics, History, Russian), 3 A (Chemistry,
French, German).

Mathematical activities

Aug-Oct 2020 **Summer research project supervised by Yuri Suris (TU Berlin)**, (*with Misha Schmalian*). We studied the geometry of discrete integrable systems generated by birational maps. Pre-print available at <https://arxiv.org/abs/2106.14301>.

July 2020 **Reading group**, 'The Knot Book' by Colin Adams.

Apr 2020 - **External secretary of Cambridge University Mathematical Society**,

Mar 2021 *Responsible for organising weekly talks by invited speakers.*

Oct-Nov 2019 **STIMULUS**, I taught six year 5 students (10 years old) introductory combinatorics, Cambridge, UK.

Sep 2019 **Reading group**, 'Lectures in Discrete Geometry' by Jiří Matoušek.

July 2019 **Team Guide at IMO**, Bath, UK.

Dec 2018 **Talk at Durham Johnston School mathematical society**, "Cutting Sequences and Beatty's Theorem", based on Sergei Tabachnikov's "Geometry and Billiards".

2016–2018 **Organiser of school mathematical society**, *Compiled problem sheets (available [here](#)) and led weekly sessions, Durham Johnston School.*

Participated in:

- 2017 **Modern Mathematics International Summer School for Students**, *Bremen, Germany*, incl. courses by Don Zagier, Bernd Sturmfels, Anton Zorich.
- 2016 **Contemporary Mathematics Summer School**, *Dubna, Russia*, incl. courses by Yulij Ilyashenko, Stanislav Smirnov, Victor Vassiliev, Alexey Sossinsky.
- 2015–2016 **Summer schools and training camps organised by UKMT (UK Mathematics Trust)**, *Leeds; Oxford; Cambridge*.
- 2010–2017 **Mathematical olympiads in the UK and Germany**, *Highest prizes 2010, 13-15, 17, full marks 2015, 17*.

Skills

Languages English, Russian (Native), German (approx C1), French (approx C1).
Programming Sage, Python, LaTeX, Geogebra
and software

Hobbies

I play ultimate frisbee, as well as badminton and table tennis. I also enjoy playing the saxophone, reading and hiking.

References

Yuri B. Suris Supervisor of 2020 summer research project, suris@math.tu-berlin.de.
(TU Berlin)
Eric Lauga Director of studies at Trinity, e.lauga@damtp.cam.ac.uk.
(Cambridge)