## Yuriy Tumarkin

Curriculum Vitae

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

Education

2018–2021 Mathematics BA, Trinity College, University of Cambridge,

First Year: Rank 9/232, 91%, class I. Second Year: Exams cancelled.

Courses taken (by the end of 2020-2021 academic year):

First-year courses: Second-year courses: Third-year courses: Groups Groups, Rings & Modules Algebraic Topology Analysis I Analysis & Topology Riemann Surfaces Numbers & Sets Metric & Topological Spaces Differential Geometry Probability Complex Analysis Algebraic Geometry Vector Calculus Geometry Representation Theory Vectors & Matrices Linear Algebra **Dynamical Systems** Differential Equations Variational Principles Linear Analysis Dynamics & Relativity Mathematical Methods Probability & Measure Markov Chains Topics in Analysis Statistics Galois Theory Fluid Dynamics Number Fields Graph Theory Electromagnetism

Quantum Mechanics

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 Michael Schmalian), We studied the geometry of discrete integrable systems generated by birational maps, generalised one of the results of https://arxiv.org/abs/2008.08308.
  - 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**, teaching six year 5 students (10 years old) introductory combinatorics, Cambridge, UK.
  - 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

Music Alto Saxophone: ABRSM Grade 8.

Sports Ultimate Frisbee (Cambridge University team), Badminton, Table tennis.

Personal Info

Date of birth 21/05/2000.

Citizenship Russia, UK.

References

Yuri 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)