# Yannik Schüler

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### **Mathematical Physicist**

# Employment \_\_\_\_\_

Mar 2024 - Postdoc

Sep 2024 University of Cambridge, DPMMS

In Dhruv Ranganathan's research group

### Education

Nov 2020 - PhD Mathematics

Apr 2024 University of Sheffield

Supervisor: Andrea Brini Current year of PhD: 3rd year

Apr 2017 - MSc Physics

Jun 2020 University of Bonn

Thesis: "Higher quantum Airy structures in two-dimensional topological gravity"

under supervision of Albrecht Klemm and Gaetan Borot

Apr 2017 - BSc Mathematics

Mar 2019 University of Bonn

Thesis: "Representation theory of modulated quivers" under supervision of Jan Schröer

Oct 2013 - BSc in Physics

Sep 2016 University of Bonn

Thesis: "Gravitational waves" under supervision of Albrecht Klemm

# Publications \_\_\_\_\_

#### **Papers**

[1] Andrea Brini and Yannik Schuler. "On quasi-tame Looijenga pairs". In: Commun. Num. Theor. Phys. 17.2 (2023), pp. 313–341. arXiv: 2201.01645 [math.AG].

#### **Pre-Prints**

[2] Gaëtan Borot, Reinier Kramer, and Yannik Schüler. "Higher Airy structures and topological recursion for singular spectral curves". In: (Oct. 2020). arXiv: 2010.03512 [math-ph].

### Talks & Presentations

Jul 2023	LMS Summer School 2023, University of Sheffield, "From Counting Curves to Strings and back"
May 2023	Geometry and Mathematical Physics Seminar, University of Birmingham, "Gromov–Witten theory from the fivefold perspective"
Feb 2023	Algebraic Geometry Seminar, University of Cambridge, "The Log-Local-Open Correspondence"
Sep 2022	Conference TRSalento22, Otranto, Italy, Poster on "The Log-Local-Open Correspondence"
Jul 2022	K-theory, algebraic cycles and motivic homotopy theory, INI Cambridge, "The Log-Local-Open Correspondence"
Apr 2022	Mirrors, Moduli and M-theory in the Midlands – LMS Regional Meeting & Workshop, Unversity of Birmingham, "Correspondences in enumerative geometry, Birmingham"

# Teaching Experience \_\_\_\_\_

Apr 2020 - Postgraduate Teaching Assistant

Sep 2023 University of Sheffield

- Demonstrator & Marker for "Core Foundation Mathematics" (Prep Course)
- Demonstrator & Marker for "Mathematical modelling" (BSc)
- Demonstrator & Marker for "Foundations of Pure Mathematics" (BSc)
- Marker for "Advanced Calculus and Linear Algebra" (BSc)

Apr 2015 - Teaching Assistant

Sep 2020 University of Bonn

- Demonstrator & Marker for "Mathematics for physicists" (BSc)
- Demonstrator & Marker for "Mathematics for computer scientists" (BSc)
- Demonstrator & Marker for "Theoretical classical mechanics" (BSc)
- Demonstrator & Marker for "Theoretical electrodynamics" (BSc)
- Demonstrator & Marker for "Theoretical statistical physics" (BSc)
- Head Tutor for "General Relativity" (MSc Physics course)

# Scholarships \_\_\_\_\_

- Scholarship of the Bonn-Cologne Grad. School of Physics and Astronomy (Oct 2017 Sep 2019)
- University of Sheffield Faculty of Science Scholarship (Nov 2020 Nov 2024)

### Languages \_\_\_\_\_

**German** mother tongue

English fluent

French basic knowledge

## Interests

Climbing, Hiking, Taekwondo.