Yannik Schüler

Mathematical Physicist

Address: 25 Stannington View Road
Sheffield, S10 1SQ
United Kingdom

Email: yschuler1@sheffield.ac.uk
Web: yschuler.gitlab.io

Employment

Mar 2024 – **Sep 2024**	**Postdoc** University of Cambridge, DPMMS In Dhruv Ranganathan's research group

Education

Nov 2020 – **Apr 2024**	**PhD Mathematics** University of Sheffield Supervisor: Andrea Brini Current year of PhD: 3rd year
Apr 2017 – **Jun 2020**	**MSc Physics** University of Bonn Thesis: "Higher quantum Airy structures in two-dimensional topological gravity" under supervision of Albrecht Klemm and Gaetan Borot
Apr 2017 – **Mar 2019**	**BSc Mathematics** University of Bonn Thesis: "Representation theory of modulated quivers" under supervision of Jan Schröer
Oct 2013 – **Sep 2016**	**BSc in Physics** 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 – Sep 2023   **Postgraduate Teaching Assistant**
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 – Sep 2020   **Teaching Assistant**
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.