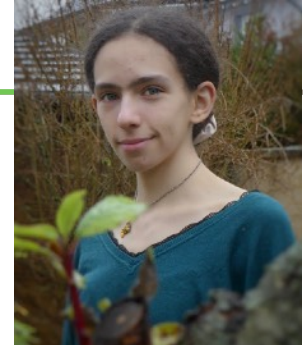

JULIE BANNWART



Date of birth: 12th July 2004

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PERSONAL INFORMATION

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Institut für Mathematik (FB 08)
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EDUCATION

- | | |
|-------------------|---|
| 04/2025 – | PhD student in Mathematics , Johannes Gutenberg-Universität (JGU), Mainz, Germany. Advisor: Prof. Tom Bachmann. |
| 09/2024 – 03/2025 | Semester in JGU, Mainz, Germany, to write my Master's thesis : <i>On the real realization of the motivic spectrum ko</i> . Advisor: Prof. Tom Bachmann. |
| 09/2023 – 03/2025 | MSc in Mathematics , Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland. |
| 07/2023 – 09/2023 | Summer internship in the EPFL Laboratory for Topology and Neurosciences ("Summer in the lab" program). Work on N_∞ -operads and model structures on poset categories. |
| 09/2020 – 07/2023 | BSc in Mathematics , EPFL, Switzerland. Thesis: <i>Model categories homotopy: the example of topological spaces and simplicial sets</i> . Adv. Prof. Jérôme Scherer. |
| 07/2020 | Baccalauréat , in Forbach, France. |

RESEARCH INTERESTS

- Unstable and stable motivic homotopy theory.
- Variants of algebraic K-theory.
- Higher algebra in general.

PREPRINTS

- *The real Betti realization of motivic Thom spectra and of very effective Hermitian K-theory*, <https://www.arxiv.org/abs/2505.07297>, May 2025.

PUBLICATIONS

- *Realization of saturated transfer systems on cyclic groups of order $p^n q^m$ by linear isometries N_∞ operads*, J. Homotopy Relat. Struct., <https://doi.org/10.1007/s40062-025-00377-6>, July 2025.
- *When equivariant homotopy theory meets combinatorics* (survey article), Pittsburgh Interdiscip. Math. Rev., vol. 3, pp. 1–27, <https://doi.org/10.5195/pimr.2025.56>, July 2025.

TALKS

- 06/2025 Young Topologists Meeting 2025, Stockholm. "The real Betti realization of very effective Hermitian K-theory, and of motivic Thom spectra"
- 06/2025 AG Seminar homotopy theory, Regensburg. "The real Betti realization of motivic Thom spectra and of very effective Hermitian K-theory",

TEACHING EXPERIENCE

- 2025 Exercise sessions for the courses Algebraic topology II and Foundations of motivic homotopy theory, JGU.
- 2024 Student assistant for second year courses: rings & fields and group & category theory, EPFL.
- 2023 Student assistant for first year linear algebra, EPFL.
- 2022 Student assistant for first year linear algebra, EPFL.
- 2018-19 Tutoring at high school.