

Viktor Frederik Majewski

Curriculum Vitae

Webpage

<https://viktormajewski.github.io/index.html>

Research Interest

- Differential Geometry** gauge theory, moduli problems in differential geometry, special holonomy spaces, special (higher) geometric structures, symplectic geometry
- Algebraic Geometry** (derived) C^∞ -geometry, categorification of geometry, homological algebra, moduli problems in algebraic geometry
- Analysis** Fredholm theories for elliptic operators on singular and non-compact spaces, geometric measure theory
- Physics** axiomatic approaches to quantum field theories, String-, M- and F-theory, general relativity

Education

- 2022–20(25) **PhD in Mathematics**, *Humboldt-University*, Berlin
- 2019–2022 **Master of Science Mathematics**, *Georg-August-University*, Göttingen
- 2017–2019 **Bachelor of Science Mathematics**, *Georg-August-University*, Göttingen
- 2016–2021 **Bachelor of Science Physics**, *Georg-August-University*, Göttingen

Employment

- 2024 **Research Stay**, *SLMath*, research stay during the semester program: Special Geometric Structures and Analysis, invited by Prof. Jason Lotay
- 2022–2025 **BMS scholarship holder**, *BMS*, Berlin
- 2021–2021 **Tutor**, *Georg-August-University*, Göttingen
Tutor for the course *Mathematics for Physicists II* by Prof. Dr. Ralf Meyer
- 2020–2021 **Tutor**, *Georg-August-University*, Göttingen
Tutor for the course *Differential Geometry and Gauge Theory I* by Prof. Dr. Victor Pidstrygach
- 2020–2020 **Tutor**, *Georg-August-University*, Göttingen
Tutor for the course *Analysis II* by Prof. Dr. Dorothea Bahns
- 2019–2020 **Tutor**, *Georg-August-University*, Göttingen
Tutor for the course *Analysis I* by Prof. Dr. Dorothea Bahns

Puplications and Preprints

- 2024 **Dirac Operators on Adiabatic Ricci-Flat Orbifold Resolutions: Uniform Elliptic Theory**, (*expected*)
- 2024 **Resolutions of Spin(7)-Orbifolds**, (*expected*)

Work in Progress

- 2025 **Spin(7)-Instantons on Resolutions of Spin(7)-Orbifolds I: Construction**, *(expected)*
- 2025 **Spin(7)-Instantons on Resolutions of Spin(7)-Orbifolds II: Moduli Spaces**, *(expected)*
- 2025 **Cayley Submanifolds Resolutions of Spin(7)-Orbifolds II: Moduli Spaces**, *(expected)*
- 2025 **Cayley Submanifolds on Resolutions of Spin(7)-Orbifolds II: Construction**, *(expected)*
- 2025 **Product-Type Spin(7)-Orbifolds and their Resolutions**, *(expected)*, joint-work with D.Platt (Imperial Collage London)

Social Engagement

- 2022–2023 **BMS Student Representative**, *BMS*, Berlin

Talks

- 2024 **Spin(7)-Orbifold Resolutions**, *UC Waterloo*
- 2024 **Dirac Operators on Orbifold Resolutions**, *SLMath*
- 2024 **Spin(7)-Orbifold Resolutions**, *Duke*