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 realtivity

Education

2024 **Research Stay**, *SLMath*, research stay during the semester program: Special Geometric Structures and Analysis, invited by Prof. Jason Lotay

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

2022–2025 **BMS scholarship holder**, *BMS*, Berlin

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 **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 **Cayley Submanifolds Resolutions of Spin(7)-Orbifolds I: 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*