# Viktor Frederik Majewski

*Curriculum Vitae*

## Research Interest

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|---|---|
| Differential Geometry | gauge theory, moduli problems in differential geometry, special holonomy spaces, special (higher) geometric structures, symplectic geometry |
| Algebraic Geometry | (derived) $C^\infty$-geometry, categorification of geometry, homological algebra, moduli problems in algebraic geometry |
| Analysis | Fredholm theories for elliptic operators on orbifolds |
| Physics | axiomatic approaches to quantum field theories, String-, M- and F-theory, general realtivity |

## Education

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|---|---|
| 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

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| 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 <br> Tutor for the course *Mathematics for Physicists II* by Prof. Dr. Ralf Meyer |
| 2020–2021 | **Tutor**, *Georg-August-University*, Göttingen <br> Tutor for the course *Differential Geometry and Gauge Theory I* by Prof. Dr. Victor Pidstrygach |
| 2020–2020 | **Tutor**, *Georg-August-University*, Göttingen <br> Tutor for the course *Analysis II* by Prof. Dr. Dorothea Bahns |
| 2019–2020 | **Tutor**, *Georg-August-University*, Göttingen <br> Tutor for the course *Analysis I* by Prof. Dr. Dorothea Bahns |

## Puplications and Preprints

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| 2024 | **Dirac Operators on Adiabatic Ricci-Flat Orbifold Resolutions**, *preprint* |
| 2024 | **Resolutions of Spin(7)-Orbifolds**, *preprint* |

## Work in Progress

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| 2024 | Spin(7)-Instantons on Resolutions of Spin(7)-Orbifolds I: (Construction) |
| 2024 | Spin(7)-Instantons on Resolutions of Spin(7)-Orbifolds II: (Moduli Space) |
| 2025 | Cayley Submanifolds on Resolutions of Spin(7)-Orbifolds |

2025 Construction/Classification of Product-Type Spin(7)-Orbifolds and their Resolutions
2025 Resolution of Quaternionic- and Hyperkähler Orbifolds

## Social Engagement

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

## Talks and Conferences

2024 , *Berkeley*
2024 , *Berkeley*
2024 , *Berkeley*
2024 , *Berkeley*
2024 , *Durham*
2024 , *Rio de Janiero*
2023 , *Stoney Brook*
2023 , *New York*
2023 , *Inverness*
2023 , *Oxford*
2022 , *Berkeley*
2022 , *Freiburg*
2022 , *Stoney Brook*
2022 , *New York*
2020 , *online*