# Georg-Joachim FRENCK

*Curriculum Vitae*

## PERSONAL DATA

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| PLACE AND DATE OF BIRTH: | Kassel, Germany \| 03 October 1990 |
| ADDRESS: | Allensteiner Straße 102, 48157 Münster, Germany |
| PHONE: | +49 15233872193 |
| EMAIL: | [Math@Frenck.net](mailto:Math@Frenck.net) |
| HOMEPAGE: | [Frenck.net/Math](http://Frenck.net/Math) |

## EDUCATION

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| JULY 2019 (EST.) | **PhD in Mathematics**, WWU, Münster. |
| SEPTEMBER 2015 | **Master of Science, Mathematik**, WWU, Münster, Grade: 1,1 (with distinction). |
| JULY 2013 | **Bachelor of Science, Mathematik**, WWU Münster, Grade: 1,7, Minor in Physics. |
| JULY 2009 | **Abitur**, Otto-Hahn-Gymnasium, Saarbrücken, Grade: 1,3. |

## TEACHING AND ORGANISATION

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| WINTER TERM 2018/19 | **Lecture course "Differential equations"**, teaching assistent. |
| WINTER TERM 2017/18 | **Lecture course "Topology II"**, teaching assistent. **Reading seminar on index theory**, organiser. |
| WINTER TERM 2016/17 | **Lecture course "Topology I"**, teaching assistent |
| 2012 - 2015 | **Tutorial assistent** Weekly excercise sessions and sheet corrections for various courses in theoretical mathmatics, both undergraduate and graduate. |

## CONFERENCES AND SCHOOLS ATTENDED

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| NOVEMBER 2018 | **Riemann Topology Meeting**, Fribourg. |
| JULY 2018 | **Young Topologists Meeting**, Kopenhagen. Talk on "Topology and Scalar curvature". |
| JULY 2016 | **Surgery and Geometry**, Workshop, Banff. Talk on "Surgery and positive scalar curvature". |
| JULY 2016 | **Summer School on Surgery and Classification of Manifolds**, Calgary. |
| JULY 2016 | **Young Topologists Meeting**, Kopenhagen. |

## Seminar talks

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| Winter term 2018/19 | **Seminar on algebraic $K$-theory**<br>Talk-title: "Whitehead-torsion".<br>**PhD-seminar**<br>Talk-title: "The action of the diffeomorphism group on the space of psc-metrics I & II". |
| Summer term 2018 | **Seminar on vector bundles and $K$-theory**<br>Talk-title: "The Hopf-invariant 1-problem".<br>**PhD-seminar**<br>Talk-title: "Surgery and positive scalar curvature I & II". |
| Winter term 2017/18 | **Seminar on Topology of 3-manifolds**<br>Talk-title: "Uniqueness of Torus-decompositions I & II". |
| Summer term 2017 | **Seminar on $L^2$-invariants**<br>Talk-title: "Triviality of $L^2$-Betti numbers for amenable groups". |
| Winter term 2016/17 | **Seminar on The theorem of Madsen-Weiss**<br>Talk-title: "Morse theory". |
| Summer term 2016 | **Oberseminar on the Farrel-Jones-conjecture**<br>Talk-title: "Algebraic $K$-theory". |
| Winter term 2015/16 | **Seminar on Characteristic classes**<br>Talk-title: "Construction of characteristic classes".<br>**Reading seminar on Spin geometry**<br>Talk-title: "The Gromov-Lawson surgery theorem II". |
| Summer term 2015 | **Seminar on Classical homotopy theory**<br>Talk-title: "Rational homotopy theory". |
| Winter term 2014/15 | **Seminar on Index theory and positive scalar curvature**<br>Talk-title: "The Gromov-Lawson surgery theorem." |
| Summer term 2014 | **Seminar on The $h$-cobordism theorem and exotic spheres**<br>Talk-title: "The Whitney-trick". |
| Winter term 2013/14 | **Seminar on Topological methods in group theory**<br>Talk-title: "Grushko's theorem". |

## Languages

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| German: | **Mother-tongue** |
| English: | **Fluent**<br>Education partially in English |
| French: | **Good**<br>6 Years in School |
| Japanese: | **Basic** |