

Georg-Joachim FRENCK

Curriculum Vitae



PERSONAL DATA

PLACE AND DATE OF BIRTH: Kassel, Germany — October, 3rd 1990
NATIONALITY: German
MARITAL STATUS: married, 2 children (age 3 and 0)
SEX: male

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POSITIONS

OCT. 2019 -	Postdoc Karlsruhe Institute of Technology
JAN. 2016 - SEP. 2019	Research associate University of Münster

EDUCATION

JUL. 2019	PhD in Mathematics , WWU Münster, Grade: Magna cum laude.
SEP. 2015	Master of Science, Mathematik , WWU Münster, Grade: 1.1 (with distinction).
JUL. 2013	Bachelor of Science, Mathematik , WWU Münster, Grade: 1.7, Minor in Physics.
JUL. 2009	Abitur , Otto-Hahn-Gymnasium, Saarbrücken, Grade: 1.3.

ARTICLES AND PREPRINTS

- [EF18] J. Ebert and G. Frenck. “The Gromov-Lawson-Chernysh surgery theorem”. In: *ArXiv e-prints* (July 2018). arXiv: [1807.06311](https://arxiv.org/abs/1807.06311).
- [Fre19] G. Frenck. “The Action of the mapping class group on metrics of positive scalar curvature”. In: *ArXiv e-prints* (2019). arXiv: [1912.08613](https://arxiv.org/abs/1912.08613).
- [Fre20] G. Frenck. “H-space structures on spaces of metrics of positive scalar curvature”. in preparation. 2020.

[FGR20] G. Frenck, F. Galaz-Garcia, and P. Reiser. “Homogeneous Spaces and Cohomogeneity One Manifolds of Positive Scalar Curvature”. in preparation. 2020.

SCIENTIFIC TALKS

JAN. 23RD, 2019	Spaces and moduli spaces of Riemannian metrics with curvature bounds – A-Fri-Ka , KIT Karlsruhe. “ <i>H</i> -Space multiplications on metrics of positive scalar curvature”
NOV. 27TH, 2019	Department of Mathematics & Statistics Colloquium , NUI Maynooth “The action of $\text{Diff}(M)$ on $\mathcal{R}^+(M)$ ”
APR. 29TH, 2019	Oberseminar Differentialgeometrie , Universität Augsburg. “The action of $\text{Diff}(M)$ on $\mathcal{R}^+(M)$ ”
APR. 25TH, 2019	Oberseminar Differentialgeometrie , Karlsruher Institut für Technologie. “The action of $\text{Diff}(M)$ on $\mathcal{R}^+(M)$ ”
APR. 16TH, 2019	Oberseminar Topologie , Georg-August-Universität Göttingen. “The action of $\text{Diff}(M)$ on $\mathcal{R}^+(M)$ ”
MAR. 11TH, 2019	Oberseminar Topologie , Université de Fribourg. “The action of $\text{Diff}(M)$ on $\mathcal{R}^+(M)$ ”
JUL. 11TH, 2018	Young Topologists Meeting , Kopenhagen. “Topology and Scalar curvature”
JUL. 24TH, 2016	Surgery and Geometry , Workshop, Banff. “Surgery and positive scalar curvature”

CONFERENCES AND SCHOOLS ATTENDED

JAN. 2020	Spaces and moduli spaces of Riemannian metrics with curvature bounds – A-Fri-Ka , KIT Karlsruhe, coorganizer.
NOV. 2018	Riemann Topology Meeting , Fribourg.
JUL. 2018	Young Topologists Meeting , Kopenhagen.
JUL. 2016	Surgery and Geometry , Workshop, Banff.
JUL. 2016	Summer School on Surgery and Classification of Manifolds , Calgary.
JUL. 2016	Young Topologists Meeting , Kopenhagen.

TEACHING AND ORGANISATION

WINTER TERM 2019/20	Lecture course “Elementary geometry” , teaching assistant.
SUMMER TERM 2019	PhD-Seminar of the Topology group , organizer.
WINTER TERM 2018/19	Lecture course “Differential equations” , teaching assistant.
WINTER TERM 2017/18	Lecture course “Topology II” , teaching assistant. Reading seminar on index theory , organizer.
WINTER TERM 2016/17	Lecture course “Topology I” , teaching assistant
2012 - 2015	Tutorial assistant Weekly exercise sessions and sheet corrections for various courses in theoretical mathematics, both undergraduate and graduate.

SEMINAR TALKS

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

LANGUAGES

GERMAN:	Mother-tongue
ENGLISH:	Fluent Education partially in English
FRENCH:	Good 6 Years in School
JAPANESE:	Basic