

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 4 and 2)
SEX: male

ADDRESS: Tennesseeallee 169, 76149 Karlsruhe, Germany
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POSITIONS

OCT. 2021 -	Postdoc University of Augsburg
OCT. 2019 - SEP. 2021	Postdoc Karlsruhe Institute of Technology Parental leave: 2 Months in 2020
JAN. 2016 - SEP. 2019	Research associate University of Münster Parental leave: 2 Months in 2018

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.

PREPRINTS

[Fre21] G. Frenck. *Sphericity of κ -classes and positive curvature via block bundles*. 2021. arXiv: [2109.10306](https://arxiv.org/abs/2109.10306) [[math.GT](https://arxiv.org/abs/2109.10306)].

ARTICLES

[FK21] G. Frenck and J.-B. Kordaß. “Spaces of positive intermediate curvature metrics”. In: *Geom. Dedicata* 214 (2021), pp. 767–800. DOI: [10.1007/s10711-021-00635-w](https://doi.org/10.1007/s10711-021-00635-w).

[Fre21b] G. Frenck. “H-Space structures on spaces of metrics of positive scalar curvature”. In: *Trans. Amer. Math. Soc.* (Sept. 2021). DOI: [10.1090/tran/8505](https://doi.org/10.1090/tran/8505).

[Fre21a] G. Frenck. “The action of the mapping class group on metrics of positive scalar curvature”. In: *Math. Ann.* (2021). DOI: [10.1007/s00208-021-02235-1](https://doi.org/10.1007/s00208-021-02235-1).

[FR21] G. Frenck and J. Reinhold. “Bundles with Non-multiplicative \hat{A} -Genus and Spaces of Metrics with Lower Curvature Bounds”. In: *International Mathematics Research Notices* (Jan. 2021). DOI: [10.1093/imrn/rnaa361](https://doi.org/10.1093/imrn/rnaa361).

- [FGGR20] G. Frenck, F. Galaz-Garcia, and P. Reiser. *Cohomogeneity One Manifolds and Homogeneous Spaces of Positive Scalar Curvature*. accepted for publication in Bulletin of the London Mathematical Society. 2020. arXiv: [2009.13142](https://arxiv.org/abs/2009.13142) [math.DG].
- [EF21] J. Ebert and G. Frenck. “The Gromov-Lawson-Chernysh surgery theorem”. In: *Bol. Soc. Mat. Mex. (3)* 27.2 (2021), Paper No. 37, 43. DOI: [10.1007/s40590-021-00310-w](https://doi.org/10.1007/s40590-021-00310-w).

SCIENTIFIC TALKS

NOV. 15TH, 2021	Geometry and topology seminar , University of Oregon. “Characteristic classes of manifold bundles over spheres”
OCT. 27TH, 2021	Geometry and topology seminar , University of Purdue. “Characteristic classes of manifold bundles over spheres”
OCT. 18TH, 2021	Oberseminar Differentialgeometrie , University of Augsburg. “Characteristic classes of manifold bundles over spheres”
AUG. 6TH, 2021	Curvature and global shape , University of Münster. “Diffeomorphisms and positive curvature”
JUN. 29TH, 2021	Analysis, Geometry and Topology of Positive Scalar Curvature Metrics (hybrid meeting) , Mathematisches Forschungsinstitut Oberwolfach. “Diffeomorphisms and positive curvature”
JUN 9TH, 2021	Geometry and topology seminar , University of Oregon. “Diffeomorphisms and positive curvature”
MAY. 17TH, 2021	Geometry and topology seminar , University of Toronto. “Diffeomorphisms and positive curvature”
DEC. 9TH, 2020	Oberseminar Global Analysis and Geometry , Universität Regensburg. “The space of positive Ricci curvature metrics”
NOV. 28TH, 2020	Oberseminar Geometrie und Topologie , Ludwigs-Maximilians-Universität München. “The action of $\text{Diff}(M)$ on $\mathcal{R}^+(M)$ ”
NOV. 17TH, 2020	Oberseminar Differentialgeometrie , Karlsruher Institut für Technologie. “The space of positive Ricci curvature metrics”
OCT. 29TH, 2020	Geometry and Topology Seminar , Durham University. “The space of positive Ricci curvature metrics”
OCT. 28TH, 2020	Topology/Geometry Zoom Seminar , University of Oregon. “The space of positive Ricci curvature metrics”
MAY 19TH, 2020	OberZOOMinar Topologie , Georg-August-Universität Göttingen. “ H -Space multiplications on metrics of positive scalar curvature”
JAN. 23RD, 2020	Spaces and moduli spaces of Riemannian metrics with curvature bounds – A-Fri-Ka , KIT Karlsruhe. “ H -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

AUG. 2021	Workshop on curvature and global shape (hybrid meeting) , Münster.
JUL. 2021	Oberwolfach workshop: Analysis, Geometry and Topology of Positive Scalar Curvature Metrics (hybrid meeting)
AUG. 2020	Virtual workshop on Ricci and scalar curvature ,
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 2021/22	PhD-Seminar of groups “Differential Geometry” and “Analysis and Geometry” , Organizer.
WINTER TERM 2021/22	(Virtual) Seminar on “Seiberg–Witten Theory” , Organizer.
SUMMER TERM 2021	Lecture course “Cobordism Theory” , lecturer.
SUMMER TERM 2020	Lecture course “Differential geometry” , teaching assistant.
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.

LANGUAGES

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