Curriculum Vitae August 22, 2024

Personal data

Name:	David Lindemann
Date of birth:	23.01.1989
Nationality:	German
Languages:	German (native), English (fluent), Danish (B2)
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Employment

2024	German Research Foundation (DFG) return postdoc grant (6 months)
2021 – 2023	German Research Foundation (DFG) individual postdoc fellowship in the "Walter Benjamin Programme" (24 months, started 01.10.21), Department of Mathematics, Aarhus University, Denmark
2018 – 2021	Postdoctoral researcher, Department of Mathematics, University of Hamburg, Germany

Education

2014 – 2018	Ph.D. in mathematics, University of Hamburg Thesis title: "Structure of the class of projective special real manifolds and their generalisations"
2011 – 2014	M.Sc. in mathematics, University of Hamburg Thesis title: "Completeness of projective special real manifolds generated by reducible polynomials"
2008 – 2011	B.Sc. in mathematics, University of Hamburg Minor field: Biology Thesis title: "Geodesic completeness of a hypersurface generated by a hyperbolic homogeneous polynomial"

Publications

2024	Special homogeneous surfaces *(with Andrew Swann)*, accepted for publication in Math. Proc. Cambridge Philos. Soc., arXiv:2303.18228
2024	Computing Irregular Hypar-based Quad-mesh Patterns for Segmented Timber Shells *(with Markus Hudert, László Mangliár, and Andrew Swann)*, Comput.-Aided Des. **177**, art. id. 103772, 12 pp., doi 10.1016/j.cad.2024.103772.
2024	Special homogeneous curves, Math. Scand. **109**, no. 2, arXiv:2208.06890

2023 Classification of left-invariant Einstein metrics on $\mathrm{SL}(2,\mathbb{R}) \times \mathrm{SL}(2,\mathbb{R})$ that are bi-invariant under a one-parameter subgroup *(with Vicente Cortés, Jeremias Ehlert, and Alexander S. Haupt)*, Ann. Glob. Anal. Geom. **63**, arXiv:2201.07343

2023 Properties of the moduli set of complete connected projective special real manifolds, Math. Z. **303**(2), arXiv:1907.06791

2021 A class of cubic hypersurfaces and quaternionic Kähler manifolds of co-homogeneity one *(with Vicente Cortés, Malte Dyckmanns, and Michel Jüngling)*, Asian J. Math. Vol. **25**, no. 1, 1–30, arXiv:1701.07882

2018 Left-invariant Einstein metrics on $S^3 \times S^3$ *(with Florin Belgun, Vicente Cortés, and Alexander S. Haupt)*, J. Geom. Phys. **128**, arXiv:1703.10512

2014 Classification of complete projective special real surfaces *(with Vicente Cortés, and Malte Dyckmanns)*, Proc. London Math. Soc. **109**, No. 2, 423–445, arXiv:1302.4570

Preprints

2022 Special geometry of quartic curves, arXiv:2206.12524

2020 Limit geometry of complete projective special real manifolds, arXiv:2009.12956

Teaching

2022 Exercise class "Numerisk lineær algebra" ("Numerical linear algebra")

2020 Exercise class "Mathematik 1 für Studierende der Informatik"
("Mathematics for computer scientists 1")

2020 Lecture course "Differential Geometry" (B.Sc. level, online), accessible at
`https://www.math.uni-hamburg.de/home/lindemann/diffgeo_SS2020_lindemann.html`

2019 Exercise class "Mathematik 4 für Studierende der Physik"
("Mathematics for physicists 4")
Exercise class "Grundbildung Geometrie (für Grundschullehrer und Sonderpädagogen)"
("Basic geometry for elementary and special needs school teachers")

2018 Seminar "Kurven und Flächen" (B.Sc. level) ("Curves and Surfaces")
Exercise class "Mathematik 3 für Studierende der Physik"
("Mathematics for physicists 3")

2016 Exercise class "Differentialgeometrie" ("Differential Geometry")

2015 Exercise class "Analysis 2"
Grading of the exercises of the course "Mathematical Methods of Classical Physics"

2014 Exercise class "Lineare Algebra und analytische Geometrie 2"
("Linear algebra and analytic geometry 2")
Exercise class "Mathematik 3 für Studierende der Physik"
("Mathematics for physicists 3")