Curriculum Vitae

Personal Data

Name Paul Schwahn
Birthdate 14. Feb. 1999

Address IMECC, Universidade Estadual de Campinas

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Position Postdoctoral researcher at IMECC, Unicamp

Education

2014–2017 B.Sc. studies at the University of Stuttgart

Oct 2017 Graduation with a B.Sc. in Mathematics at the University of Stuttgart.

Bachelor's thesis: Scattering theory for automorphic functions

Award of the Robert Bosch GmbH for excellent B.Sc. degree

2017–2020 M.Sc. studies at the JLU Gießen and the University of Stuttgart

Apr 2020 Graduation with a M.Sc. in Mathematics at the University of Stuttgart.

Master's thesis: Einstein deformations on homogeneous spaces

Jan 2021 Award of the Freunde der Mathematik an der Universität Stuttgart

(Friends of mathematics at the University of Stuttgart) for best M.Sc.

degree

Jul 2021 Award of the Freunde der Universität Stuttgart (Friends of the Univer-

sity of Stuttgart) for extraordinary scientific accomplishments

2020–2023 Doctoral studies in Mathematics under the supervision of Prof. Uwe

Semmelmann

Jul 2023 Graduation summa cum laude with a Dr. rer. nat. at the University of

Stuttgart. Doctoral thesis: Stability of Einstein metrics on homoge-

neous spaces

Work experience & Funding

2016–2020 Student assistant/tutor for various mathematics courses at the Uni-

versity of Stuttgart

2020–2023 Research associate/teaching assistant at the Institute of Geometry

and Topology, University of Stuttgart. Partially funded by SPP 2026

Geometry at Infinity

	Assistance for the courses <i>Analysis</i> ; <i>Geometry for Teachers</i> ; <i>Advanced Mathematics</i> (for engineering students)		
2023–2024	Postdoctoral researcher at <i>Laboratoire de mathématiques d'Orsay</i> , Université Paris-Saclay. Funded by the <i>BRIDGES</i> collaboration, ANR-21-CE40-0017. Partially funded by the <i>Procope</i> program, Project No. 48959TL		
as of 2024	Postdoctoral researcher at IMECC, Unicamp. Fellow of <i>FAPESP</i> , Project 2024/08127-4, under the <i>BRIDGES</i> collaboration		
Schools, semina	ars, stays		
Sep 2016	<i>Ferienakademie</i> (summer school) of FAU Erlangen-Nürnberg, TU Munich and University of Stuttgart		
Oct 2020	Working seminar at Philipps-Universität Marburg, Department of Mathematics		
Jul 2021	Summer school course <i>Riemannian foliations and Lie group actions</i> , Scuola Matematica Interuniversitaria, Cortona		
May 2022	Research stay at CUNY with Renato Bettiol		
Sep 2022	Block seminar <i>Construction and degeneration of Einstein 4-manifolds</i> , University of Regensburg		
Nov 2022	Oberwolfach Graduate Seminar Geometry and Topology of Compact Homogeneous Spaces		
Jun 2024	Summer school of the <i>BRIDGES meeting 2024</i> , Institut d'Études Scientifiques de Cargése		
Invited seminar	Invited seminar talks		
Sep 2021	Differential Geometry Seminar, Universidad Nacional de Córdoba		
Nov 2021	Geometry & Topology Seminar, University of Stuttgart		
May 2022	CUNY Geometric Analysis Seminar		
May 2022	Geometry Seminar, University of Florence		
Jul 2022	London Geometry & Topology Seminar		
May 2023	Riemannian Topology Seminar, University of Stuttgart		
May 2023	Online talk at the Virtual Seminar on Geometry with Symmetries		
Jul 2023	Working group seminar of the differential geometry group, University of Regensburg		
Oct 2023	Séminaire Géométrie Topologie Dynamique, Université Paris-Saclay		
Dec 2023	Research Seminar <i>Differential Geometry and Analysis</i> of Philipps-Universität Marburg		
Mar 2024	Geometry seminar of Université Claude-Bernard Lyon		
Apr 2024	ULB geometry seminar, Université Libre de Bruxelles		

Jul 2024	Geometry & Topology Seminar, University of Stuttgart	
Jul 2024	Seminar Geometry, KU Leuven	
Oct 2024	Seminário SP de Geometria, São Carlos (joint meeting of ICMC, IME, UFSCar, Unicamp)	
Nov 2024	Geometry seminar of IMECC, Unicamp	
Mar 2025	Geometry seminar of ICMC (São Carlos), University of São Paulo	
Aug 2025	Geometry seminar of IME (São Paulo), University of São Paulo	
Conference posters		

Jul 2021	Poster and online talk at Mathematical Congress of the Americas
Mar 2024	Poster at the conference Special Holonomy and Geometric Structures
	on Complex Manifolds, IMPA

Conference talks

Aug 2022	Spaces, Structures, Symmetries, Università degli Studi di Bari Aldo Moro
Jun 2023	BRIDGES workshop <i>Special geometries and gauge theories</i> , University of Pau
Jul 2023	Einstein Spaces and Special Geometry, Institut Mittag-Leffler (invited speaker)
Jul 2024	BRIDGES meeting in <i>Gauge Theory, extremal structures and stability</i> , Institut d'Études Scientifiques de Cargèse (invited speaker)
Jul 2024	Junior Meeting <i>Einstein Geometry and Special Holonomy</i> , CAU Kiel (invited speaker)
Feb 2025	MAM III on Quaternion-Kähler manifolds and the LeBrun–Salamon Conjecture, Philipps-Universität Marburg
Jun 2025	Problem-solving workshop <i>Computational Geometric Analysis</i> , City University of New York (invited speaker)
Oct 2025	<i>CICM</i> (18th Conference on Intelligent Computer Mathematics), University of Brasilia
Oct 2025	Workshop on Symmetries in Geometry and Physics, Universidad Nacional San Antonio de Abad del Cusco (invited speaker)

Organization of events

Sep 2023	Sesquinar, a student seminar about tensors, University of Stuttgart
Oct 2023	International conference <i>The Crazy World of Arthur L. Besse: a work-shop on Einstein manifolds</i> , University of Stuttgart
Sep 2024	<i>Semi</i> -L∃∀N- <i>ear</i> , a student seminar about formalization of mathematics, University of Stuttgart.

Miscellaneous

2015–2020 Commitment in the Faculty Student Group in Stuttgart

2022–2023 Elected representative of doctoral students in the Faculty Council

(Mathematics and Physics), Chairman of Faculty Student Council and

member of the Student Parliament in Stuttgart

Skills and interests

Research Riemannian geometry, curvature, special holonomy, geometric anal-

ysis, manifolds with symmetries, Lie theory

Languages English (fluent), French (very basic), German (native), Portuguese

(basic)

Programming C++, LiE, Matlab, Python, SageMath

Hobbies Climbing, Piano, Pen&Paper RPGs, Game development, Formaliza-

tion of mathematics/computer-assisted proofs

Campinas, September 17, 2025