Konstantin Wernli

Curriculum Vitae

Gertrudstrasse 27

8003 Zürich

☎ +41 76 426 75 13

✉ konstantin_wernli@gmx.ch

Birthdate: 01.12.1990

Education

09/2014 - now	**PhD in Mathematics**, *University of Zurich*, Zurich, Switzerland.
09/2012 - 10/2013	**MSc in Mathematics**, *ETH*, Zurich, Switzerland, *Grade point average: 5.83 (out of 6)*.
	awarded "with Distinction", focusing on pure mathematics and its application in theoretical physics
09/2009 - 3/2013	**BSc in Mathematics**, *ETH*, Zurich, Switzerland, *Grade point average: 5.43 (out of 6)*.
	with a focus on Computer Science and Theoretical Physics
2002 - 2008	**Matura and International Baccalaureate**, *Realgymnasium Rämibühl*, Zurich, Switzerland.

Master thesis

Title	*Computing Entanglement Polytopes*
Supervisor	Matthias Christandl
Abstract	In Quantum Information Theory, Entanglement Polytopes are a way of classifying multipartite entanglement coarsening the usual classification by SLOCC. The thesis discusses algebraic, geometric and numerical ways of computing them.

Teaching Experience

09/2014 - now	**Teaching Assistant**, *University of Zurich*, Zurich, Switzerland, bla .
	Organisation and Teaching of Exercise Classes and Exams
2010-2013	**Holiday Tutoring**, *ETH*, Zurich, Switzerland.
	Preparing and holding week-long exam preparation courses in analysis and linear algebra
2010-2013	**Teaching Assistant**, *ETH*, Zurich, Switzerland.
	Teaching exercise groups for semester courses and exam preparation courses in various subjects including analysis, complex analysis, and linear algebra.

Attendance of Workshops and Conferences

June 2015	**Rabat, Morocco**, *Summer school on deformation theory, mathematical physics, and rational homotopy theory.*
	Gave a minicourse on dgla/L^∞-algebras governing deformations
May 2015	**Bonn**, *Introductory school on in the HIM trimester program on homotopy theory, manifolds, and field thoeries.*
January 2015	**Les Diablerets**, *Winter school on mathematical physics.*
October 2014	**Geneva**, *Conference on Higher structures in Geometry and Physics.*
June 2012	**Berlin**, *Summer school "Topology and groups" on geometric group theory.*

Languages

German	**Native Speaker**
English	**Fluent**
Italian	**Fluent**
French	**Intermediate**

Advanced coursework

Mathematics

The h-cobordism theorem	The h-cobordism theorem and its application as a proof of the Poincaré conjecture in dimension at least six
Groethendieck-Teichmuller group	Introduction to the Groethendieck-Teichmuller group and various applications
Further	Functional Analysis, Differential geometry, Lie Groups, Representation Theory, Invariant Theory

Physics

Theoretical Physics	Introduction to Electrodynamics and Quantum Mechanics for Mathematicians
Further	General Relativity, Quantum Field Theory, Quantum Information Theory

Computer Science

Numerics I &II	Theory and Practice of numerical solutions to ODEs and other problems
Theoretical Informatics	Introduction to Computer Science
Algorithms and Complexity	Introduction to algorithm developping with runtime and exactness analysis
Algorithms, Probability and Computing	Runtime and Efficiency Analysis of randomised algorithms