

## Curriculum Vitae

Peter Scholze

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### Education:

- Since April 2010: PhD studies at the Rheinische Friedrich-Wilhelms Universität Bonn, with a Hausdorff PhD grant of the Bonn International Graduate School in Mathematics
- March 2010: Master in Mathematics at the Rheinische Friedrich-Wilhelms Universität Bonn
- Winter 2009: Master Thesis: “The Langlands-Kottwitz approach for the modular curve” under the supervision of M. Rapoport
- Summer 2008: Bachelor thesis: “Bad Reduction of Shimura Curves” under the supervision of M. Rapoport
- Winter 2007 – Summer 2009: collaborating with M. Rapoport in the proofreading and rewriting of the 2<sup>nd</sup> edition of the book “Smooth Compactifications of Locally Symmetric Varieties” by Ash, Mumford, Rapoport, Tai, published by Cambridge University Press
- 2007 – March 2010: Studies of mathematics at the Rheinische Friedrich-Wilhelms Universität Bonn
- 2007 – March 2010: Scholar of the Studienstiftung des Deutschen Volkes
- 2007: Abitur (mark 1,0) at the Heinrich-Hertz-Oberschule, Berlin
- 2004-2007: participation in seminars about Lie Algebras, Algebraic Curves, Chow and GIT Quotients, Toric Geometry, Birational Geometry, Mori Theory, Algebraic Stacks, lecture courses in Differential Geometry, Logic, and Characteristic Classes under the supervision of Prof. Altmann at the Freie Universität, Berlin
- 2002-2007: intense self-studies of mathematics, in particular Analysis, Linear Algebra, Algebra, Algebraic Geometry, Differential Geometry, Algebraic Number Theory, Algebraic Topology, Complex Geometry, Class Field Theory, Etale Cohomology and the Weil Conjectures

2004-2007: participation in the International Mathematical Olympiad (3 Gold, 1 Silver medal)

Teaching:

April – July 2010: organization of the ARGOS seminar on the Local Langlands Correspondence for  $GL_n$  over  $p$ -adic fields

October 2008 – August 2009: teaching in exercise groups for lecture courses in Algebraic Number Theory and Complex Analysis, grading students' solutions and exams

March – July 2009: work in the Problem Selection Committee of the 50<sup>th</sup> International Mathematical Olympiad, held in Bremen, also grading students' solutions at the Olympiad

2007 – March 2009: giving various preparation courses for German participants in the International Mathematical Olympiad, also making up and grading exams

Conferences, summer schools, etc., attended:

Long-term: Galois Trimestre, Paris, January – March 2010  
Semester at Harvard, September – December 2010

Short-term : Cours intensif d'  $GL_2$  , Luminy March 2008  
Summer school on moduli spaces of abelian varieties, Mainz Spring 2008  
Summer Academy on String Topology and Floer Homology, St. Johann August 2008  
Workshop on affine flag manifolds and principal bundles, Berlin September 2008  
Conference on arithmetic algebraic geometry on the occasion of M. Rapoport's 60. birthday, Bonn October 2008  
Minerva School on  $p$ -adic Methods in Arithmetic Algebraic Geometry, Jerusalem Spring 2009  
Summer Academy on K-Theory, St. Johann, September 2009  
Towards a  $p$ -adic Local Langlands Correspondence, Sevilla, October 2009

Invited talks:

"A new approach to the Local Langlands Correspondence for  $GL_n$  over  $p$ -adic fields", Institute of Advanced Studies, November 17, 2010

"A new approach to the Local Langlands Correspondence for  $GL_n$  over  $p$ -adic fields", Chicago, November 5, 2010

"A new approach to the Local Langlands Correspondence for  $GL_n$  over  $p$ -adic fields", Harvard, September 15, 2010

“A new approach to the Local Langlands Correspondence for  $GL_n$  over  $p$ -adic fields”, Max-Planck-Institut für Mathematik, Bonn, August 4, 2010

“Die Hasse-Weil Zeta-Funktion von Modulkurven”, University of Regensburg, April 23, 2010

“The Langlands-Kottwitz approach for the modular curve”, Institut Henri Poincaré, Paris, March 12, 2010

“The Hasse-Weil zeta function of the modular curve”, University of Paderborn, Dezember 17, 2009

Publications, Preprints:

The Local Langlands Correspondence for  $GL_n$  over  $p$ -adic fields, Preprint, Bonn, 2010, arXiv:1010.1540

The Langlands-Kottwitz method for some simple Shimura varieties, Preprint, Bonn, 2010, arXiv:1003.2451

The Langlands-Kottwitz method for the modular curve, to appear in International Mathematical Research Notices, Bonn, 2009, arXiv:1003.1935

Cambridge, October 27, 2010