



Simon Kapfer

Curriculum vitae

Personal information

Nationality **German.**
Date of birth **2 September 1988**, Lauingen (Donau), Germany.
Marital status **Single.**

Formation

October 2013 – **PhD in Mathematics**, Augsburg University, University of Poitiers, Subject of
Spring 2016 PhD thesis: Automorphisms of irreducible holomorphically symplectic manifolds.
October 2010 – **M. Sc. in Mathematics**, Augsburg University, final grade: 1.10 (ECTS: A),
December 2012 Subject of master thesis: Berechnungen im Kohomologiering der Hilbertschemata
von Punkten auf Flächen, Subsidiary subject: Physics.
October 2007 – **B. Sc. in Mathematics**, Augsburg University, final grade: 1.09 (ECTS: A),
September 2010 Subject of bachelor thesis: Die Nullhomotopie der 720-Grad-Drehung, Subsidiary
subject: Physics.

Publications

- 2015 **Symmetric Powers of Symmetric Bilinear Forms, Homogeneous Orthogonal Polynomials on the Sphere and an Application to Compact Hyperkähler Manifolds**, to appear in *Communications in Contemporary Mathematics*, arXiv:1507.00157.
- 2014 **Computing Cup-Products in integral cohomology of Hilbert schemes of points on K3 surfaces**, to appear in *LMS Journal of Computation and Mathematics*, arXiv:1410.8398.

Conferences and Workshops

- June 2015 **Géométrie Algébrique en Liberté XXIII**, Leuven, Belgium.
- February 2015 **Workshop on geometry and arithmetic of hyperkähler manifolds**, Hannover, Germany.
- November 2014 **GAGC**, Luminy, France.

- June 2014 **Géométrie Algébrique en Liberté XXII**, *Trieste, Italy*, Talk: Integer cohomology of compact Hyperkähler manifolds.
- February 2014 **Winter School: Higher Structures in Algebraic Analysis**, *Padova, Italy*.
- December 2013 **Andrejewski Day: Random Partitions in Mathematics and Physics**, *Augsburg, Germany*.
- October 2013 **Master class: Around Torelli's theorem for K3 surfaces**, *Strasbourg, France*.
- September 2013 **Autumn School: Rational curves on algebraic varieties**, *Poitiers, France*, Talk: Parametrizing morphisms with extra structures.

Teaching

- Winter 2015 **Lectures on Algebraic Geometry (on interim basis)**.
- 2009 – 2016 **Tutorials for various math lectures (regularly)**, including *Calculus, ODEs, Functional analysis, Algebraic Geometry*, at Augsburg University.

Other professional experience

- April 2013 – August 2013 **CAD software development**, *Compositence GmbH*, Leonberg, Germany.
- February 2011 – April 2011 **Simulation "Crowd Control"**, *Siemens AG*, Munich, Germany.

Scholarships

- October 2014 – August 2015 **DAAD Jahresstipendium**, *full scholarship*, spent in Poitiers, France.

Honorary positions

- Since 2013 **Direction of a "Matheschülerzirkel"**, special offer of Augsburg University for pupils, interesting math not taught at school.
<http://www.math.uni-augsburg.de/schueler/mathezirkel/>
- Since 2013 **Project "Best MINT"**, special offer of Augsburg University for freshmen.
- 2014 – 2015 **Séminaire des doctorants**, mathematical seminar organised by PhD students.
- 2013 – 2014 **Pizzaseminar**, *talks and organisation*, mathematical seminar by volunteers.
<http://pizzaseminar.speicherleck.de/>

Languages

- Spoken languages **English, French, German.**
- Programming languages **C++, Haskell, Java, Maple, R, VBA, Python.**