

Curriculum Vitae

Julia Sauter

Education

- 12 / 2013 viva (=defense) of the phd in mathematics, University of Leeds
- title of phd thesis: Springer theory and the geometry of quiver flag varieties
 - supervisor: Andrew Hubery
- 2 / 2007 diploma thesis, Universität Duiburg-Essen
- title : Über Hodgezahlen von Vektorbündeln, die auf einer endlichen Überlagerung trivial werden
 - supervisor: Helene Esnault

Employment

3/2014 - 3/2015	Bielefeld University, scientific assistant
11/2013 - 2/2014	Bielefeld University, scientific assistant (with administration duties)
4/2007 - 7/2009	University of Paderborn, scientific assistant
10/2006 - 2/2007	University of Duisburg-Essen, student assistant
4/2006 - 7/2006	University of Duisburg-Essen, student assistant
10/2004 - 9/2005	Bielefeld University, student assistant
10/2002 - 9/2003	Bielefeld University, student assistant
1/2002 - 9/2002	Bielefeld University, student assistant

Interests

- General: Geometric representation theory, reductive groups, representations of finite dimensional algebras, derived categories of sheaves
- Specific: Springer theory, quiver flag varieties, KLR algebras, noncommutative resolutions of singularities, Hall algebras

Preprints

- Parabolic nil Hecke algebras and parabolic Steinberg algebras, [arXiv:1307.0972v12](https://arxiv.org/abs/1307.0972v12), July 2013.

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- Generalized quiver Hecke algebras, [arXiv:1306.3892v2](https://arxiv.org/abs/1306.3892v2), July 2013
- A survey on Springer Theory , [arXiv:1307.0973v3](https://arxiv.org/abs/1307.0973v3) , July 2013.

Talks

- *A journey from Springer theory to KLR algebras*, Bochum, 14th of August 2013
- *From Springer theory to monoidal categories* , YWIT IV, Bonn, 9th of June, 2013
- *Classical and quiver-graded Springer theory / From Springer theory to monoidal categories* , Birep Seminar, Bielefeld, 24th and 31th May, 2013
- *A survey on Springer theory* , Leeds Algebra Seminar, 27th February, 2012
- *An affine cell decomposition of An-equioriented quiver flag varieties* , Birep Seminar, Bielefeld, 21th July, 2011
- *On irreducible components of Dynkin quiver flag varieties* , Women in Representation Theory, Bielefeld, 11th December, 2010

Teaching

- *Tutorial for Special Aspects in Mathematics: Number Theory*, Bielefeld, SS 14
- *Basic tutorial (homework class of 5 courses for the first year)*, Leeds, Oct-Dec 2009, *Tutorial for Algebra and Calculus* , Leeds, March-June 2010
- *Tutorial and Seminar Coxeter groups* , Paderborn, SS 08
- *Marking linear algebra* , SS 06 in Essen and *Marking Riemannian Surfaces*, WS 06/07 in Essen.
- *Tutorial for Linear Algebra I or II*, WS 02/03, SS 03, WS 04/05, SS 05 in Bielefeld and WS 08/09, SS 09 in Paderborn

Personal details

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Bielefeld, 01.04.2014,

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