

CURRICULUM VITAE

SEIDON ALSAODY

Personal Data.

- Date of Birth: 1986-09-08
- Nationality: Swedish
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Degrees.

- May 2015: Ph.D. in Mathematics. Thesis: A Categorical Study of Composition Algebras via Group Actions and Triality.
- December 2012: Ph.Lic. in Mathematics. Thesis: On Finite-Dimensional Absolute Valued Algebras.
- June 2010: M.Sc. in Mathematics. Thesis: Generalisations of the Algebraic Theory of Connective Segmentation.
- June 2008: B.Sc. in Physics. Thesis: Complex Geometry.

Employments.

- August 2015 – Present: Visiting Lecturer, Dept. of Mathematical Sciences, Chalmers University of Technology and the University of Gothenburg, Sweden.
- July 2010 – June 2015: Doctoral Student, Dept. of Mathematics, Uppsala University, Sweden.
- August – December 2009: Teacher, Dept. of Mathematics, Uppsala University, Sweden.
- July 2006 – June 2009: Teaching Assistant and Teacher, Dept. of Mathematics, Uppsala University, Sweden.

Research.

Publications.

- (7) Composition Algebras and Outer Automorphisms of Algebraic Groups. Submitted. <http://arxiv.org/abs/1504.01278>
- (6) Classification of the Finite-Dimensional Real Division Composition Algebras having a Non-Abelian Derivation Algebra. To appear in J. Algebra. <http://arxiv.org/abs/1404.1896>

- (5) An Approach to Finite-Dimensional Real Division Composition Algebras through Reflections. *Bull. Sci. math.* 139 (2015), 357–399. <http://dx.doi.org/10.1016/j.bulsci.2014.10.001>
- (4) Corestricted Group Actions and Eight-Dimensional Absolute Valued Algebras. *J. Pure Appl. Algebra* 219 (2015), 1519–1547. <http://dx.doi.org/10.1016/j.jpaa.2014.06.014>
- (3) Morphisms in the Category of Finite Dimensional Absolute Valued Algebras. *Colloq. Math.* 125 (2011), 147–174. <http://dx.doi.org/10.4064/cm125-2-2>
- (2) Connective Segmentation Generalized to Arbitrary Complete Lattices (with J. Serra). In: P. Soille, M. Pesaresi, and G. K. Ouzounis (Eds.): *ISMM 2011, LNCS 6671* (2011), pp. 61–72. http://dx.doi.org/10.1007/978-3-642-21569-8_6
- (1) Determining the Elements of a Semigroup. U.U.D.M. Report 2007:3, ISSN 1101-3591, Dept. of Mathematics, Uppsala University.

Invited Seminar Talks.

- (5) Finite Dimensional Absolute Valued Algebras. Universidad de Almería, Spain, October 2013.
- (4) Finite Dimensional Real Division Composition Algebras with Nonabelian Derivation Algebras. Universidad de Zaragoza and Universidad de La Rioja, Spain, October 2013.
- (3) An Approach to Absolute Valued Algebras by Reflections. Universidad de Zaragoza and Universidad de Málaga, Spain, October 2013.
- (2) Induced Group Actions and Finite Dimensional Real Division Algebras. Uppsala University, Sweden, September 2012.
- (1) Generalizing Connective Segmentation to Arbitrary Complete Lattices. Centre for Image Analysis, Uppsala, Sweden, September 2011.

Conference Talks.

- (9) Composition Algebras via Lie Algebras of Derivations and Automorphisms of Algebraic Groups. Algebraic Groups and Lie Algebras International Workshop, Norris Point, Newfoundland, Canada, August 2015.
- (8) Composition Algebras, Triality, and Automorphisms of Algebraic Groups. AMS–EMS–SPM International Meeting, Porto, Portugal, June 2015.
- (7) Composition Algebras, Triality and Algebraic Groups. Maurice Auslander Distinguished Lectures and International Conference, Woods Hole, Massachusetts, USA, May 2015.
- (6) Using Derivations to Understand Eight-Dimensional Algebras. Fall Meeting of the Swedish Mathematical Society, Gothenburg, Sweden, November 2014.
- (5) Eight-Dimensional Absolute Valued Algebras. Third Mile High Conference on Nonassociative Mathematics, Denver, Colorado, USA, August 2013.
- (4) Morphisms of Absolute Valued Algebras: Description, Irreducibility and Factorization. VI International Conference on Non Associative Algebra and Its Applications, Zaragoza, Spain, November 2011.
- (3) Connective Segmentation Generalized to Arbitrary Complete Lattices. International Symposium on Mathematical Morphology, Intra, Italy, July 2011.

- (2) On Homomorphisms of Finite Dimensional Absolute Valued Algebras. Annual Meeting of the Swedish Mathematical Society, Stockholm, Sweden, June 2011.
- (1) On Morphisms of Finite Dimensional Absolute Valued Algebras. Maurice Auslander Distinguished Lectures and International Conference, Woods Hole, Massachusetts, USA, April 2011.

Teaching and Supervision.

Courses Taught at the Dept. of Mathematical Sciences, Chalmers University of Technology and the University of Gothenburg, Sweden.

- As Main Lecturer: Mathematics for Marine Engineers.

Courses Taught at the Dept. of Mathematics, Uppsala University, Sweden.

- As Main Lecturer: Basic Algebra, Abstract Algebra, Advanced Linear Algebra, Calculus in One Variable.
- As Seminar Teacher: Preparatory Course in Mathematics, Basic Course in Mathematics, Basic Algebra, Abstract Algebra, Linear Algebra, Calculus in One Variable, Calculus in Several Variables, Elementary Probability and Statistics.

Students Supervised at the Dept. of Mathematics, Uppsala University, Sweden.

- Kronosjö, A., Hurwitz 1, 2, 4, 8-sats [Hurwitz's 1, 2, 4, 8-Theorem], undergraduate thesis, 2013.
- Lilja, K., Kvaternioner [Quaternions], undergraduate thesis, 2013.

Pedagogic Activities.

- Academic Teacher Training Course, Uppsala University, Sweden, 2013.
- Muntliga metoder i matematik [Oral Methods in Mathematics]. Poster and seminar talk at the Pedagogic Conference of the Faculty of Science and Technology, Uppsala University, Sweden, March 2014.

Commissions.

- January 2011 – December 2014 : Organizer of the Seminar Series 'Matematikseminariet' for Undergraduate Students, Dept. of Mathematics, Uppsala University, Sweden.
- October 2010 – June 2011: Member of the Faculty Board, Faculty of Science and Technology, Uppsala University, Sweden.
- September 2010 – December 2011: Member of the Equal Opportunities Workgroup, Dept. of Mathematics, Uppsala University, Sweden.
- September 2010 – June 2011: Chair of the PhD Students' Council of the Faculty of Science and Technology, Uppsala University, Sweden.

Education.

- July 2010 – June 2015: Doctoral Studies in Mathematics (Algebra), Dept. of Mathematics, Uppsala University, Sweden.
- January – May 2010: Research Internship (as part of the Master Programme in Mathematics), ESIEE Paris, France.
- August 2008 – June 2010: Master Programme in Mathematics, Uppsala University, Sweden.
- August 2005 – June 2008: Scientific Programme in Physics, Uppsala University, Sweden.

Language Skills. Swedish, English (fluent); French (excellent); Arabic (adequate) Latin (elementary).