Department of Mathematics
520 Portola Plaza
MS 6363
Los Angeles, CA 90095

+1 (310) 825-4701
+1 (310) 210-6851
noah@math.ucla.edu
www.math.ucla.edu/~noah

# Noah White

**employment**    University of California, Los Angeles, Assistant Adjunct Professor, 2016 - present

Max Plank Institute for Mathematics, Postdoctoral Fellow, Spring 2016

**education**    University of Edinburgh, PhD in Mathematics, 2016

> Thesis: Combinatorics of Gaudin systems: cactus groups and the RSK algorithm
> Advisors: Iain Gordon and Michael Wemyss

University of Sydney, Honours in pure mathematics, 2011

> Thesis: Modular representation theory of the symmetric groups
> Advisor: Anthony Henderson

University of Sydney, Bachelor of Science, 2010

**research interests**    My research centres on connections between representation theory and algebraic geometry which give meaning to, or are inspired by interesting combinatorial phenomena.

**papers and preprints**    "Monodromy of real Bethe vectors for the Gaudin model". Accepted, Journal of Combinatorial Algebra. arXiv:math/1511.04740.

"The center of the reflection equation algebra via quantum minors" (with D. Jordan). Submitted. arXiv:math/1709.09149.

"The cactus group and Lusztig's isomorphism" (with R. Rouquier). In preparation.

"Calogero-Moser cells in type A and the RSK correspondence" (with A. Brochier and I. Gordon). In preparation.

See website for up-to-date material.

**Talks**    *Research conferences and meetings*

AMS Western Sectional Meeting, Special Session on Rational Cherednik Algebras and Categorification, November 2017, "The center of the reflection equation algebra (and quantum group) for $GL_n$".

Algebra and Representation Theory in the North (ARTIN), March 2014, "The centre of quantum $GL_n$".

*Department seminar talks*

UCLA algebra seminar, April 2018 "A moduli space of approaches to the representation theory of the symmetric groups".

University of Southern California, seminar, January 2017, "The center of the reflection equation algebra (and quantum group) for $GL_n$".

University of Toronto, Geometric representation theory seminar, October 2017, "The center of the reflection equation algebra (and quantum group) for $GL_n$".

Universität zu Köln, Algebra seminar, "The cactus group and the Gaudin model".

Max Plank Institut für Mathematik, Bonn, Oberseminar, "The cactus group and RSK".

Institut de Mathématiques de Jussieu, Paris, Groupes, Représentations et Géométrie seminar, March 2016, "Monodromy of the Gaudin system".

University of Melbourne algebra / geometry / topology seminar, August 2015, "Cactus group action on Young Tableaux".

University of Queensland pure maths seminar, August 2015, "Cactus group action on Young Tableaux".

University of Sydney algebra seminar, July 2015, "Cactus group actions in Schubert calculus, crystals and integrable systems".

Queen Mary University of London algebra seminar, February 2015, "Schubert calculus and the cactus group".

*General interest and colloquium style talks*

Joint Scottish PG Colloquium, May 2015 "Reality in algebraic geometry".

GEARS seminar, Glasgow, December 2014, "The representation theory of the symmetric groups via the action of a "maximal torus"".

Postgraduate colloquium, Edinburgh, October 2015, "Group cohomology and wallpaper groups".

Postgraduate colloquium, Edinburgh, March 2013, "Symmetric functions and pipe dreams".

**Service**  *Reviewer/referee.* For example for Duke Mathematical Journal, IMRN.

*Glasgow Edinburgh Algebra Research Student (GEARS) Seminar,* 2014-present.
Organiser, grant holder (£1750 per year) and founder. GEARS is a regular meeting for Scottish algebra students (10-20 participants). Activities include, invited international speakers, participant talks, social events.

*Geometry club,* Edinburgh 2013-2014.
Organiser. A weekly seminar for postgraduates and postdocs in Edinburgh.

**grants and awards**

Nominated for the (university-wide) Teaching Award: 2015 (best student who tutors award), 2015 (best feedback award), 2013 (best student who tutors award).

Edinburgh IAD researcher-led initiative grant, for the running of GEARS 2014-15.

Laura Wisewell travel scholarship, 2015.

Edinburgh global research scholarship, 2012-2016 .

Eleanor Sophia Wood Postgraduate Research Travelling Scholarship, 2012-2016.

**teaching experience**

*Courses taught at UCLA*

Linear algebra, MATH 115A, Spring 2019, Winter 2019, Winter 2018.

Probability theory, MATH 170A, Fall 2017.

Calculus for life science students, MATH 3B, Winter 2019, Fall 2018, Fall 2017, Winter 2017, Fall 2016.

Calculus of several variables, MATH 32B, Spring 2018, Winter 2017.

Integration and infinite series, MATH 31B, Spring 2017.

*Tutoring at the University of Edinburgh*

SMSTC (graduate) algebra 2015/16

SMSTC (graduate) geometry/topology 2015/16

Differential manifolds 2014/15

Honours algebra 2014/15

Geometry 2015/16, 2014/15

Introduction to Lie groups 2013/14

Calculus and its applications 2015/16, 2014/15, 2013/14

Fundamentals of pure mathematics 2013/14, 2012/13

Introduction to linear algebra 2015/16, 2014/15, 2013/14, 2012/13

*Tutoring at the University of Sydney*

Basic pharmaceutical sciences (mathematics component) 2012

Linear algebra 2011, 2012

Discrete mathematics 2011

**languages**    English (native)

German (fluent)