

Alessio Cipriani

Personal Details

Place of Birth: Sansepolcro (AR), Italy.

Date of Birth: 10/06/1990.

Institutional Email: alessio[dot]cipriani[at]univr[dot]it

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Current Position: Postdoc (RtdA), Dipartimento di Informatica - Settore di Matematica, Università degli Studi di Verona.

Education

Ph.D. in Mathematics, University of Liverpool, 2015-2020

Thesis Title: Perverse Sheaves and Finite Dimensional Algebras.

Supervisor: Dr. Jon Woolf.

Submitted: 30/09/2019.

Final Exam: 14/01/2020, Liverpool.

Award Date: 06/04/2020.

Title conferred: 17/07/2020.

Title declared equivalent by the Università of Trento, 01/08/2023.

MSc cum Laude in Pure Mathematics, Università degli Studi di Roma, La Sapienza, 2012-2015

Thesis Title: Intersection (Co)homology, Witt Spaces and their Homology L-class.

Thesis Advisor: Prof. Paolo Piazza.

Title conferred: 24/03/2015.

BSc in Pure Mathematics, Università degli Studi di Roma, La Sapienza, 2009-2012

Thesis Title: Alcuni Metodi Computazionali Discreti (in Italian).

Thesis Advisor: Prof. Valentina Barucci.

Title conferred: 24/10/2012.

Employment History

RtdA, Dipartimento di Informatica - Settore di Matematica at the Università degli Studi di Verona

20/12/2022 - 19/12/2025.

Postdoc, Institute of Algebra and Number Theory (IAZ) at the University of Stuttgart

01/10/2022 - 19/12/2022.

Postdoc, Università degli Studi di Roma Tor Vergata

01/05/2021 - 30/04/2022.

Temporary Teaching Fellow, Università di Verona

01/03/2021 - 30/09/2021.

Student Demonstrator, University of Liverpool

01/09/2017 - 30/04/2020.

Other Roles

Acted as a referee for Communications in Algebra, Journal of Pure and Applied Algebra, zbMATH.

Other Positions

Postdoc at the Leonhard Euler International Mathematical Institute in St. Petersburg

Two year position (extendable to three years); offer received in February 2022 and supposed to start in May 2022.

MSCA at the Università di Verona (Call HORIZON-MSCA-2021-PF-01)

Supervisor: Lidia Angeleri Hügel.

Total score: 86/100 (not funded due to budgetary constraints). The application received the Seal of Excellence on 05/05/2022.

Research Visits

University of Cumbria, Ambleside Campus

Short visit (20/01/2023 - 03/02/2024), research stay together with Dr. Jon Woolf (University of Liverpool) financed by INdAM-GNSAGA, CUP E53C23001670001.

University of Bonn

Short visit (20/01/2023 - 03/02/2024), research group of Prof. Dr. Catharina Stroppel.

University of Liverpool

Short visit (01/07/2023 - 08/07/2023), Dr. Jon Woolf.

Università degli Studi di Roma Tor Vergata

Short visit (02/05/2023 - 04/05/2023), Prof. Martina Lanini.

Universität Stuttgart

Short visit (14/01/2023 - 21/01/2023), Institute of Algebra and Number Theory (IAZ).

Ruhr-Universität Bochum

Visiting position (04/05/2022 - 29/07/2022), research group of Prof. Dr. Markus Reineke.

Research Interests

Algebraic Topology, Homological Algebra, Category Theory, Representation Theory.

In particular: stratified spaces, algebraic characterisations of perverse sheaves, finite dimensional algebras, quiver representations, silting theory, spaces of Bridgeland stability conditions on the constructible derived category.

Member of GNSAGA-INdAM (Gruppo Nazionale per le Strutture Algebriche, Geometriche e le loro Applicazioni).

List of Publications

Wall And Chamber Structure For A Special Biserial Algebra Coming From Perverse Sheaves on \mathbb{P}^n (with M. Lanini), submitted, arXiv version

When are there enough projective perverse sheaves? (with J. Woolf) (Glasgow Mathematical Journal, Volume 64 , Issue 1, January 2022, pp. 185–196, [journal link](#)).

PhD Thesis, Perverse Sheaves and Finite Dimensional Algebras, University of Liverpool, April 2020, 216 pages, DOI: 10.17638/03081420.

Conferences and Seminar Talks

Highest weight categories via stability conditions.

MALGA Seminar, Università di Padova.

7th February 2024

Highest weight categories via stability conditions.

Oberseminar Representation Theory, University of Bonn.

2nd February 2024

A Series of Two Talks on Perverse Sheaves, Seminar Representation Theory, Università di Verona

Perverse sheaves: introduction and examples.

16th May 2023

On the global dimension of perverse sheaves.

24th May 2023

Highest weight perverse sheaves

FD Seminar, online.

27th April 2023

Introduction to gluing simple-minded collections and silting objects

Working group, Algebra Oberseminar IAZ, University of Stuttgart

8th November 2022

Two Lectures on Perverse Sheaves, Algebra Oberseminar IAZ, University of Stuttgart

Part 1: Introduction to perverse sheaves and examples.

25th October 2022

Part 2: Projective and quasi-hereditary perverse sheaves.

8th November 2022

Quasi-hereditary Perverse Sheaves*12th-16th September 2022*

STAR (Sifting Theory, Algebras and Representations), meeting of the Network on Sifting Theory, Charles University Prague.

Perverse Sheaves, Finite Dimensional Algebras and Quivers*12th July 2022*

ABCD-Seminar (Aachen-Bochum-Cologne Darstellungstheorie Seminar), Aachen.

Coxeter groups and Kazhdan–Lusztig polynomials*3rd-9th April 2022*

Arbeitsgemeinschaft: Geometric Representation Theory (organised by D. Juteau, S. Riche, W. Soergel, G. Williamson), Oberwolfach.

Perverse Sheaves, Finite Dimensional Algebras and Quivers*28th May 2021*

ARTS (Algebra and Representation Theory Seminar), Università di Roma Tor Vergata.

Perverse Sheaves and Finite Dimensional Algebras*4th December 2020*

MALGA seminar, online.

Perverse Sheaves, Finite Dimensional Algebras and Quivers*6th-7th June 2019*

Early Career Topology Researchers, University of Sheffield.

Perverse Sheaves and Finite Dimensional Algebras*14th-16th April 2019*

Connections and Directions in Representation Theory and Related Topics, University of Leeds.

Derived Categories, t-structures and Hearts*2nd April 2019*

Working Seminar on Bridgeland Stability Conditions, University of Liverpool.

Derived Functors*25th October 2017*

Working Seminar on Fourier-Mukai Transforms, University of Liverpool.

Perverse Sheaves as Modules*30th June 2017*

TTT103 (Transpenine Topology Triangle), University of Liverpool.

Triangulated Categories*October 2015*

University of Liverpool.

Organisation

Topological and Geometrical Methods in Representation Theory, co-organised with Lidia Angeleri, Anna Barbieri, Rosanna Laking.

15th November 2024

MALGA (Moduli ALGebre Anelli, seminario Padova-Verona), co-organised with Lidia Angeleri and Jorge Vitória.

since September 2023

Working group on "Gluing simple-minded collections and silting objects", Algebra Oberseminar IAZ, University of Stuttgart.

November - December 2022

Mini-course (co-organiser with Martina Lanini) "Stability spaces from an algebraic viewpoint", Università degli Studi di Roma Tor Vergata.

*6th-10th June 2022***Languages**

Italian Native Language.

English Fluent (TOEFL certificate).

French, Spanish Basic.

Teaching Experience

Università di Verona, Semester 1 A.A. 2024/2025.

Linear Algebra and Analysis [Matricole Pari], Bachelor's Degree in Bioinformatics.

Università di Verona, Semester 1 A.A. 2023/2024.

Linear Algebra, Bachelor's Degree in Bioinformatics.

Universität Stuttgart, Semester 1 A.A. 2022/2023.

Assistant for Höhere Mathematik 1 für Ingenieurstudiengänge.

Università di Verona, Semester 2 A.A. 2020/2021.

Linear Algebra, Bachelor's Degree in Computer Science.

Algebraic Geometry - Methods of Algebraic Geometry, Master's Degree in Mathematics.

University of Liverpool, Graduate Teaching Assistant and Student Demonstrator.

Modules including: Linear Algebra, Metric Spaces, Geometry of Curves, Group Theory, Commutative Algebra, Number Theory, Combinatorics.