

# Eirini Chavli

## Curriculum Vitae

Institut für Algebra und Zahlentheorie,  
Universität Stuttgart,  
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### Personal Information

BIRTH 23/09/1985 (Athens)  
NATIONALITY Greek  
FAMILY Married

### Education

2012–2016 **Ph.D. in Pure Mathematics**, *Université Paris Diderot*.  
**Title:** *The Broué-Malle-Rouquier conjecture for the exceptional groups of rank 2*  
**Supervisor:** Ivan Marin  
**Examiners:** P. Etingof, L. Funar  
**Jury:** F. Digne, L. Funar, N. Jacon, G. Malle, I. Marin, G. Pfeiffer  
2011–2012 **MSc (Master 2) in Mathématiques Fondamentales**, *Université Paris Diderot*.  
2007–2010 **MSc in Pure Mathematics**, *University of Athens*.  
2003–2007 **Bachelor in Mathematics**, *University of Athens*.  
2000–2003 **High school diploma**, *High school of Glyka Nera, Athens*.

### Professional Experience

2016–today **Postdoctoral researcher and teaching assistant**, *University of Stuttgart*.  
2015–2016 **Temporary lecturer (Attaché Temporaire d’Enseignement et de Recherche)**, *Université de Picardie Jules Verne*.  
2012–2015 **Teaching assistant**, *Université Paris Diderot*.  
2007–2010 **Teaching assistant**, *University of Athens*.

### Teaching Experience

2016–2017 **University of Stuttgart**.  
“Higher Mathematics 3”, 2nd year (Engineering)  
“Higher Mathematics 2”, 1st year (Engineering)  
2015–2016 **Université de Picardie Jules Verne**.  
“Galois Theory”, Master 1 (Maths)  
“Linear Algebra II”, 2nd year (Maths)  
“Topology”, 2nd year (Maths)  
“Linear Algebra I”, 1st year (Informatics, Maths)  
“Mathematical Tools”, 1st year (Informatics)  
“Probabilities and Statistics”, 1st year (Biology)  
2012–2015 **Université Paris Diderot**.  
“Elementary Algebra and Analysis”, 1st year (Physics). I was teaching the same course for 3 years  
2007–2010 **University of Athens**.  
“Basic Algebra”, 2nd year (Maths). I was teaching the same course for 3 years  
2007 **1st experimental High school in Athens (Gennadios)**.  
Trainee-ship on Algebra  
2004–2010 **Private Tutor on Mathematics**.  
High School students from public and private schools (International Baccalaureate, American College of Greece, Greek-German School)

## Research Activities

### Research interests

Hecke algebras, braid groups, finite Coxeter groups, Complex reflection groups, decomposition matrices, representation theory.

### Ph.D. thesis

The BMR freeness conjecture for the exceptional groups of rank 2, Université Paris Diderot, Paris 7, 2016 (available in arXiv: 1608.00834).

### Publications

1. *Universal deformations of the finite quotients of the braid group on 3 strands*, Journal of Algebra 459 (2016), 238-271.
2. *The BMR freeness conjecture for the first two families of the exceptional groups of rank 2*, Comptes Rendus Mathématique, Académie des Sciences, 355, Ser. 1 (2017), 1-4.
3. *The BMR freeness conjecture for the tetrahedral and octahedral family*, Communications in Algebra (2017), DOI: 10.1080/00927872.2017.1324872.
4. *Decomposition matrices for the generic Hecke algebras on 3 strands in characteristic zero* (2017), in preparation.

### Talks in International Conferences

- 15-6-2017 **Women in Geometry and Topology**, University of Zürich.  
*Complex braid groups and generic Hecke algebras*
- 3-2-2017 **Colloque Tournant 2017 du GDR TLAG**, Université de Picardie Jules Verne.  
*Une classification des représentations irréductibles de  $B_3$*
- 29-8-2016 **Algebraic Combinatorics in Representation Theory**, CIRM, Luminy.  
*The BMR freeness conjecture*
- 5-7-2016 **Representation theory in Samos**, University of the Aegean Sea.  
*The irreducible representations of  $B_3$  of small dimension*
- 24-2-2016 **Winterbraids VI**, Université de Lille I.  
*The irreducible representations of  $B_3$  of dimension at most 5*
- 27-3-2015 **Rencontre de l'ANR ACORT à Paris**, Université de Reims Champagne-Ardenne.  
*The irreducible representations of  $B_3$*
- 5-12-2014 **Nikolaus Conference**, Lehrstuhl D, Aachen.  
*The BMR Freeness Conjecture: the Tetrahedral and Octahedral Families*
- 17-6-2014 **Summer school**, Institut d'Études Scientifiques de Cargèse.  
*Affine Nil-Hecke algebras*
- 9-6-2014 **Young Algebraists' conference**, EPFL.  
*The BMR conjecture for the Hecke algebra of the finite quotients of the braid group on  $n$  strands*
- 9-5-2014 **ARTY 2**, Universität Emmy Noether Zentrum, Nuremberg.  
*The BMR conjecture for the Hecke algebra of the finite quotients of the braid group on  $n$  strands*

### Talks in Seminars

- 30-5-2017 **Séminaire d'Algèbre-Géométrie**, Université de Versailles - St Quentin.  
*Les matrices de décomposition des algèbres de Hecke génériques à 3 brins*
- 16-8-2016 **Oberseminar**, University of Stuttgart.  
*The BMR freeness conjecture: recent work and open cases*
- 4-5-2016 **Séminaire de théorie des groupes**, Université de Picardie Jules Verne.  
*La conjecture de BMR pour les groupes exceptionnels de rang 2*
- 21-4-2016 **Seminaire des thésards**, Université de Picardie Jules Verne.  
*On generic Hecke algebras*
- 19-5-2015 **Séminaire d'Algèbre-Géométrie**, Université de Versailles - St Quentin.  
*The Hecke algebras of the exceptional groups of rank 2*

- 5-2-2015 **Seminar Gruppen und Darstellungen**, Technische Universität Kaiserslautern.  
*The BMR freeness conjecture: the exceptional groups of rank 2*
- 26-3-2014 **Seminaire des thésards “Bourbakettes”**, Université Paris Diderot.  
*Groupe de tresses*
- 3-4-2014 **Groupe de travail des thésards**, Université de Picardie Jules Verne.  
*Revêtements II*
- 17-3-2014 **Groupe de travail des thésards**, Université de Picardie Jules Verne.  
*Revêtements I*
- 12-3-2014 **Séminaire de théorie des groupes**, Université de Picardie Jules Verne.  
*Deformations of the finite quotients of the braid group on 3 strands*
- 20-2-2014 **Groupe de travail des Thésards**, Université de Picardie Jules Verne.  
*La méthode de Van-Kampen*
- 25-2-2010 **Group theory seminar**, EPFL.  
*Representation Theory and Young tableaux*
- Attended conferences**
- Feb 2017 **Winterbraids VII**, Université de Caen, Normandie, LMNO.
- Dec 2016 **Nikolaus Conference**, Lehrstuhl D, Aachen.
- Sep 2016 **Finite Chevalley groups, reflection groups and braid groups**, EPFL.
- Jun 2016 **Journée mathématique du LAMFA**, Université de Picardie Jules Verne.
- May 2016 **Rencontre de l’ANR ACORT à Amiens**, Université de Reims Champagne-Ardenne.
- Mar 2016 **Journées d’algèbre**, Université de Caen, Normandie, LMNO.
- Jul 2015 **Applied Representation Theory**, Université de Picardie Jules Verne.
- Jun 2015 **Journée mathématique du LAMFA**, Université de Picardie Jules Verne.
- Jan 2015 **Perspectives in Lie Theory**, Centro di Ricerca Matematica Ennio De Giorgi, Pisa.
- Nov 2014 **Algèbres et noeuds**, Université de Versailles–St Quentin.
- Apr 2014 **Journée de présentation de SAGE**, Université de Picardie Jules Verne.
- Jan 2014 **Algebra and Computation**, Université Lyon 1.
- Dec 2013 **Darstellungstheoretage**, Lehrstuhl D, Aachen.
- Dec 2013 **Nikolaus Conference**, Lehrstuhl D, Aachen.
- Nov 2013 **Réunion d’utilisateurs de Sage en région parisienne**, Observatoire de Paris.
- Jul 2013 **Combinatoire Algébrique en théorie des représentations**, Université de Tours.
- Jun 2013 **Journée mathématique du LAMFA**, Université de Picardie Jules Verne.
- Jan 2013 **Combinatoire Algébrique en théorie des Représentations**, Université de Besançon.
- Dec 2012 **Nikolaus Conference**, Lehrstuhl D, Aachen.
- May 2012 **Théorie de Garside: état de l’art et perspectives**, Université de Picardie Jules Verne.
- Sep 2008 **Problems in Analysis**, University of the Aegean Sea.

### Further scientific activities

- Jun 2017 *Using Writing to Improve Student Learning*, HDZ, Stuttgart.
- Jun 2017 *Counting women: the challenges of being a female mathematician*, SwissMap, Zürich.
- May 2015 Tutor in the program *Animath pour collégiens et lycéens*.
- Apr 2015 *The use of Hal in science and bio-medicine*, CFDip, Paris.
- Apr 2015 *Group management*, CFDip, Paris.
- Apr 2015 *Latex in English*, CFDip, Paris.
- Jun 2011 Tutor in the program *Introduction to LaTeX*, University of Athens.
- 2004–2007 Participant in the project *Didactics of Mathematics*, University of Athens.

## Fellowships, Scholarships and Awards

- 2016–2017 Postdoctoral Fellowship, University of Stuttgart.
- 2015–2016 ATER, Université de Picardie Jules Verne.
- 2012–2015 Ph.D. scholarship from Université Paris Diderot.
- 2002 2nd place in the National Mathematics Competition “Euclides” of the Hellenic Mathematical Society.

## Languages

- GREEK Native language
- ENGLISH Full professional proficiency (Certificate of Proficiency in English, University of Michigan)
- FRENCH Full professional proficiency (Semester-long courses in French language for foreigners (Français Langue Etrangère), level B2-C1, Université Paris Diderot)
- GERMAN Level A2

## IT Skills, Mathematical Software

GAP3 package CHEVIE, SAGE, Maple

## Interests

- DANCE Ballet and Modern dance
- PIANO Participated in several concerts
- OTHER Cinema, Music, Cooking, Swimming, Origami, Countryside activities