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PROFESSIONAL EXPERIENCE AND EDUCATION

- **2011/2016** : Lecturer at the Laboratoire de Mathématiques et Physique Théorique, Université François Rabelais de Tours
- **2009/2011** : Lecturer at the School of Mathematics, University of East Anglia, Norwich
- **2008/2009** : Research fellow under the supervision of Andrew Mathas and Robert Howlett, University of Sydney
- **2004/2008** : Co-supervised PhD in Mathematics at the University of Aberdeen and Université Claude Bernard Lyon 1

Thesis title : *“Kazhdan-Lusztig cells in affine Weyl groups with unequal parameters”*

Supervisors :

M. Meinolf Geck, University of Aberdeen

M. Philippe Caldéro, Université Claude Bernard Lyon 1

Members of the jury

Mme. Kessar Radha

M. Cédric Bonnafé

M. Philippe Caldéro

Meinolf Geck

M Iain Gordon

M. Kenji Iohara

The thesis is available online :

<http://tel.archives-ouvertes.fr/tel-00300796/fr/>

SCIENTIFIC ACTIVITIES

Grant and Project

- **2014–2016** Manager with Kilian Raschel of the regional project entitled “Random walks and Dunkl process : combinatorial and algebraic approaches” (project MADACA)
<http://www.fdpoisson.fr/madaca/index-eng.html>
- **2012–2016** Member of the ANR project ACORT
<http://njacon.perso.math.cnrs.fr/acort.html>

Organisation of conferences

- **2016** Conference “ Representation Theory of Finite and p-adic Groups of Lie Type” at the CIRM in november
<http://scientific-events.weebly.com/1504.html>
- **2016** Final conference of the regional project MADACA at the Domaine de Chales in june
<http://www.fdpoisson.fr/madaca/conference.html>
- **2016** Winter school on random walks and Dunkl process in Tours in january.
<http://www.fdpoisson.fr/madaca/ecole-hiver.html>
- **2013** Workshop of the ANR ACORT in Tours in july
<http://www.lmpt.univ-tours.fr/~guilhot/combin.html>

LIST OF PUBLICATIONS

• Publications in scientific journals

- (1) *On the determination of Kazhdan-Lusztig cells for affine Weyl groups with unequal parameters*, Journal of Algebra 318 (2007), no. 2, pp 893–917.
- (2) *On the lowest two-sided cell in affine Weyl groups*, Representation Theory 12 (2008), 327-345.
- (3) *Generalized induction of Kazhdan-Lusztig cells*, Annales de l’Institut Fourier, 2009, 59 (4), pp.1385-1412
- (4) *Kazhdan-Lusztig cells in affine Weyl groups of rank 2*, Int. Math. Res. Not. IMRN 2010, no. 17, 2010
- (5) *Affine cellularity of Hecke algebras of rank 2*, en collaboration avec V. Miemietz Math. Zeit. 271 373-397 (2012).
- (6) *Cellularity of the lowest two-sided ideal of an affine Hecke algebra*, Adv. in Math. 255 525-561 (2014).

(7) *Ordering families using Lusztig's symbols in type B : the integer case*, en collaboration avec Nicolas Jacon, *Journal of Algebraic Combinatorics* 41 157-183 (2015).

(8) *Isomorphic induced modules and Dynkin diagram automorphisms of semisimple Lie algebras*, en collaboration avec Cédric Lecouvey, *Glasgow Math. Journal* 58 187-203 (2016).

• **Publications in préparation**

(9) *Asymptotic Lowest tw-sided cell*, en collaboration avec C. Bonnafé, disponible à l'adresse suivante <http://arxiv.org/abs/1103.4025>

(10) *Admissible subsets and Littelmann paths in affine Kazhdan-Lusztig theory*, disponible à l'adresse suivante <https://arxiv.org/abs/1606.05542>

SOME TALKS

- **Cellule bilatère minimale dans un groupe de Weyl affine**, Algebra seminar in Reims, march 2016
- **Kazhdan-Lusztig Cells in (Affine) Weyl Groups**, Algebra seminar in Norwich, june 2015
- **Chemins de Littelmann et bases cellulaires dans les algèbres de Hecke affines**, Chevalley seminar, Paris VII, october 2014
- **Cellularity of the lowest two-sided ideal of an affine Hecke algebra**, Conference “Groups, Nonassociative Algebras and Combinatorics”, CIRM, september 2013
- **Cellules de Kazhdan-Lusztig dans les groupes de Weyl affines**, days of the GDR Lie Theory, Mulhouse, june 2013

INVITATIONS

• **Invitations**

- Invited from the 10th to the 22nd of december at the University of Sydney by James Parkinson
- Participation to the special semestre “Automorphic Forms, Combinatorial Representation Theory and Multiple Dirichlet Series” in ICERM in 2013
- Invited from the 11th to the 15th of june 2012 at the University of Franche-Comté by Nicolas Jacon
- Research in pairs in the CIRM form the 2nd to the 13th of July 2012 on tensor products of irreducible representations of Lie algebras and Kac-Moody algebras.