

DR NADIA MAZZA – CURRICULUM VITAE

CURRENT AFFILIATION : Department of Mathematics and Statistics, Fylde College,  
Lancaster University, Lancaster, LA1 4YF, UK.

CURRENT POSITION : Senior Lecturer in Pure Mathematics (since 1st August 2014).

EDUCATION :

- PhD in mathematics (algebra), 2003, Université de Lausanne, Lausanne, Switzerland.

ADVISOR : Prof. Jacques Thévenaz

THESIS TITLE (French) : *Modules d'endo-permutation.*

- Diplôme de mathématicien, 1999, Université de Lausanne.

ADVISOR : Prof. Jacques Thévenaz

TITLE (French) : *Les trois cas de fusion du groupe diédral d'ordre huit.*

- Licence ès sciences mathématiques, 1998, Université de Lausanne.

SYNOPSIS OF RESEARCH INTERESTS : *MSC 20, 18, 19*

Groups and their representations in general, modular representations of (in-)finite groups, endo-permutation, endotrivial, and invertible modules, group cohomology, (pro-)fusion systems on (pro-) $p$ -groups, subgroup complexes, Burnside rings.

AWARDS, SCHOLARSHIPS AND GRANTS : Several Faculty and Department research and travel grants. In addition:

- 2002 – 2003: Research fellowship of the Swiss National Science Foundation.
- 2003: Faculty award for the excellence and quality of Ph.D. thesis, granted by the Faculté des géosciences et de l'environnement, Université de Lausanne, Switzerland.
- 2006 – 2008: Advanced research fellowship of the Swiss National Science Foundation.
- January-May 2008: Postdoctoral Fellowship of the Mathematical Sciences Research Institute, for the research program *Representation Theory of Finite Groups and Related Topics*, Berkeley, CA, USA.
- July 2010: Grants from the EPFL, Swiss Science National Foundation, Swiss Mathematical Society, CUSO and Faculty FSB at the EPFL to organise an international conference in honour of Prof. Thévenaz' 60th birthday at the EPFL Lausanne, Switzerland.
- December 2010: London Mathematical Society Research in Pairs grant to work with S. Bouc in Lancaster.
- Since February 2012: Fellow of the Higher Education Academy (UK).
- April 2013 and April 2014: London Mathematical Society Educational grants to organise an outreach event (Florence Nightingale Day).
- April 2015: London Mathematical Society Grant Scheme 1 to organise a workshop on profinite groups in Lancaster.

PUBLICATION LIST :

- The Dade group of a metacyclic  $p$ -group, *J. Algebra*, 266 (2003), 102–111.
- Endo-permutation modules as sources of simple modules, *J. Group Theory*, 6 (2003), 477–497.
- The Dade group of (almost) extraspecial  $p$ -groups, *J. Pure Appl. Algebra*, 192, no. 1-3 (2004), 21–51. *With S. Bouc.*
- Varieties of nilpotent elements for simple Lie algebras I: Good primes, *J. Algebra*, 280 (2004), 719–737. *With the University of Georgia VIGRE Algebra Group.*
- Varieties of nilpotent elements for simple Lie algebras II: Bad primes, *J. Algebra*, 292, Issue 1 (2005), 65–99. *With the University of Georgia VIGRE Algebra Group.*
- Endotrivial modules for finite groups of Lie type, *J. Reine Angew. Math.*, 595 (2006), 93–120. *With J. Carlson and D. Nakano.*
- Support varieties for Weyl modules over bad primes, *J. Algebra*, 312, Issue 2 (2007), 602–633. *With the University of Georgia VIGRE Algebra Group.*
- The group of endotrivial modules in the normal case, *J. Pure Appl. Algebra*, 209 (2007), 311–323.
- Endotrivial modules in the cyclic case, *Archiv der Mathematik*, 89, Issue 6 (2007), 497–503. *With J. Thévenaz.*
- Endotrivial modules for the symmetric and alternating groups, *Proc. Edinburgh Math. Soc.*, 52, Issue 1 (2009), 45–66. *With J. Carlson and D. Nakano.*
- The Dade group of a fusion system, *J. Group Theory*, 12 (2009), 55–74. *With M. Linckelmann.*
- Glauberman and Thompson’s theorems for fusion systems, *Proc. Amer. Math. Soc.*, 137, Issue 2 (2009), 495–503. *With A. Díaz, A. Glessner and S. Park.*
- Connected components of the category of elementary abelian  $p$ -subgroups, *J. Algebra*, 320, Issue 12 (2008), 42–48.
- The group of endotrivial modules for the symmetric and alternating groups, *Proc. Edinburgh Math. Soc.*, 5, Issue 01, (2010), 83–95. *With J. Carlson and D. Hemmer.*
- Control of transfer and weak closure in fusion systems, *J. Algebra*, 323, Issue 2 (2010), 382–392. *With A. Díaz, A. Glessner and S. Park.*
- On Oliver’s  $p$ -group conjecture: II, *Math. Ann.*, 347, Number 1 (2010), 111–122. *With D. Green and L. Héthelyi.*
- $p$ -groups with maximal elementary abelian subgroups of rank 2, *J. Algebra*, 323, Issue 6 (2010), 1729–1737. *With G. Glauberman.*
- Endotrivial modules for  $p$ -solvable groups, *Trans. Amer. Math. Soc.*, 363 (2011), 4979–4996. *With J. Carlson and J. Thévenaz.*
- On a strong form of Oliver’s  $p$ -group conjecture, *J. Algebra*, 342 (2011), 1–15. *With D. Green and L. Héthelyi.*
- Endotrivial modules over groups with quaternion or semi-dihedral Sylow 2-subgroup, *Journal of the European Mathematical Society*, 15 issue 1 (2013), 157–177. *With J. Carlson and J. Thévenaz.*
- Auslander-Reiten components for some Knörr lattices, *Bulletin of the London Mathematical Society*, 45, Issue 4 (2013), 800–810. *with M. Geline.*

- Torsion-free endotrivial modules, *J. Algebra*, 398 (2014), 413–433. *With J. Carlson and J. Thévenaz.*
- Endotrivial Modules for the General Linear Group in a Nondefining Characteristic, *Math. Z.*, 278, Issue 2 (2014), 901–925. *With J. Carlson and D. Nakano.*
- Endotrivial modules for the sporadic simple groups and their covers, *J. Pure and Applied Alg.*, 219 (2015), 4203–4226. *with C. Lassueur.*
- Endotrivial modules for the Schur covers of the symmetric and alternating groups, *Algebras and Representation Theory*, 18 (2015), 1321–1335. *with C. Lassueur.*
- Endotrivial modules for finite groups of Lie type A in nondefining characteristic, *Math. Z.*, *Math. Z.*, Volume 282, Issue 1 (2016), 1-24. DOI: 10.1007/s00209-015-1529-1. *With J. Carlson and D. Nakano.*
- The pro- $p$  group of upper triangular matrices, *J. Pure and Applied Alg.*, Volume 221, Issue 12, (2017), 2928–2952. DOI 10.1016/j.jpaa.2017.02.009.

#### EXTRAS

Several lectures, seminar talks and other short contributions in national and international scientific meetings. In addition:

- 22-25 June 2010: Co-organiser of the conference *Group Representation Theory and Related Topics* in honour of Prof. Jacques Thévenaz’s 60th birthday (Lausanne, Switzerland).
- 25-30 June 2010: Given a short course for the Doctoral School of the EPFL (Lausanne, Switzerland) – Title : *Finite  $p$ -groups in representation theory.*
- yearly since April 2013: creator and organiser of the Florence Nightingale Day, outreach event, Lancaster University.
- November 2013: Attended the training course “Understanding the autism spectrum for Higher Education professionals” of the National Autistic Society (UK).
- 23 April 2015: Organiser of the meeting “Profinite groups”, Lancaster university.
- November 2015: Attended the standard training course of Mental Health First Aid (England).
- Since September 2016: Grant lead for the LMS Joint Research Group in the UK “Functor categories for groups”.

#### PHD SUPERVISION

- 2013-2017: Alec Gullon.

#### MEMBERSHIP OF PROFESSIONAL ORGANISATIONS

- Since September 2005: member of the Mathematisches Forschungsinstitut Oberwolfach (MFO).
- Since December 2006: ordinary member of the London Mathematical Society.
- Since 2012: member of the European Women in Mathematics (EWM).
- Since 2014: member of the European Mathematical Society (EMS).