

## CURRICULUM VITAE

<b>NAME</b>	DAVID ANTHONY TOWERS
<b>APPOINTMENTS</b>	2016- : Professor of Pure Mathematics 2014-16: Head of Undergraduate Teaching 2013-14: Head of Department 2010-13: Assessment Officer 2000-05: Associate Dean for Undergraduate Teaching, Faculty of Science and Technology 2000-02: Teaching, Learning and Assessment Representative, Faculty of Science and Technology 1989-96: Head of Department 1987-    Senior Lecturer, Lancaster University 1978-79: Research Associate, University of California, Berkeley 1974-87: Lecturer, Lancaster University 1973-74: Temporary Lecturer, Sheffield University 1971-73: Junior Research Fellow, Sheffield University
<b>QUALIFICATIONS</b>	2016: SFHEA 1972: PhD (Algebra, University of Leeds). 1968: BSc (First Class Hons., Mathematics, University of Newcastle).

### RESEARCH

- My main research interests lie in the area of algebras, where I have worked on general non-associative algebras, Lie algebras, Jordan algebras, Leibniz algebras and Genetic algebras.
- I have been especially active in investigating the relationship between the structure of a Lie algebra and that of its lattice of subalgebras, the influence of certain special subalgebras and the structure of solvable and nilpotent Lie algebras, particularly in relation to splitting properties of these algebras. I have also worked on Lie algebras that just fail to have a particular property, maximal abelian subalgebras and ideals in solvable Lie algebras, the nilpotent length of a solvable Lie algebra and generalised nilradicals.
- I have had many invitations to visit and to speak at institutions throughout Europe, Asia and the USA. In the last few years I have spoken at conferences in Göttingen, Cadiz, Mulhouse, Porto, Malaga and Coimbra. I have also had a number of researchers visiting me in Lancaster and am involved in three current collaborations.
- I was a member of the organizing committee for the Second International Conference on Groups and Algebras in Suzhou, China. I also organized a conference on Non-Associative Algebra and its Applications held in Lancaster in 2018.
- I regularly referee for more than 25 leading journals. I have refereed research proposals for ESRC, for the Czech Science Foundation and for the National Commission for Scientific and Technological Research in Chile and am a member of the Peer-Review Panel of Experts for the National Centre of State Science and Technology Evaluation in Kazakhstan.
- I have acted as a PhD/MPhil External Examiner at several institutions, including the Universities of Leeds, Warwick, London and Seville.

- I have published over 70 research papers, the most recent of which are given below
53. "Solvable Lie A-Algebras", J. Algebra **340 (1)** (2011), 1 - 12.
  54. "On Maximal Subalgebras Of Lie Algebras Containing Engel Subalgebras ", J. Pure Appl. Algebra **216** (2012), 688 - 693.
  55. "Solvable Complemented Lie Algebras ", Proc. Amer. Math. Soc. **140** (2012), 3823 - 3830.
  56. "Further Results on Elementary Lie Algebras and Lie A-Algebras", (jointly with V. Varea), Comm. Alg. **41 (4)** (2013), 1432 - 1441.
  57. "Complements of Intervals and Prefrattini Subalgebras Of Solvable Lie Algebras ", Proc. Amer. Math. Soc **141** (2013), 1893-1901.
  58. "Supplements to Maximal Subalgebras Of Lie Algebras ", Comm. Alg. **41 (10)** (2013), 3848 - 3857.
  59. "On Conjugacy of Maximal Subalgebras Of Solvable Lie Algebras", Comm. Alg. **42 (3)** (2014), 1350 - 1353.
  60. "On Abelian Subalgebras And Ideals of Maximal Dimension in Supersolvable Lie Algebras", (Jointly with M. Ceballos), J. Pure Appl. Algebra **218** (2014), 497 - 503.
  61. "On the Lengths of Certain Chains of Subalgebras In A Lie Algebra", Comm.Alg. **42** (2014), 4778 - 4789.
  62. "On Certain Decompositions of Solvable Lie Algebras", J. Lie Theory **24 (4)** (2014), 969 - 978.
  63. "On Minimal Non-Elementary Lie Algebras", Proc. Amer. Math. Soc. **143** (2015), 117 - 120.
  64. "Subalgebras That Cover or Avoid Chief Factors of Lie Algebras", Proc. Amer. Math. Soc. **143** (2015), 3377 - 3385.
  65. "C-sections Of Lie Algebras", J. Algebra **427** (2015), 76 – 84.
  66. "Maximal Subalgebras And Chief Factors of Lie Algebras", J. Pure Appl. Algebra **220** (2016), 482 - 493.
  67. "On n-Maximal Subalgebras Of Lie Algebras", Proc. Amer. Math. Soc. **144** (2016), 1457-1466.
  68. "Chief factors of Lie Algebras", J. Generalised Lie Theory Appl. S2 (2016), in memory of John Nash.
  69. "On Maximal Subalgebras And a Generalised Jordan Holder Theorem for Lie algebras", Comm. Alg. **45(3)** (2017), 1284-1293
  70. "The Generalized Nilradical Of A Lie Algebra", J. Algebra **470** (2017), 197-218.
  71. "Lie Algebras with Nilpotent Length Greater Than That of Each of Their Subalgebras", Algebras and Representation Theory **20(3)** (2017), 735-750.
  72. "On Complemented Non-Abelian Chief Factors of Lie Algebras" (jointly with Zekiye Ciloglu), J. Lie Theory **28** (2018), 427-442.
  73. "Leibniz A-algebras", to appear in Comm. Math.
- Current projects include the following
74. "C-subideals Of Lie Algebras" (jointly with Zekiye Ciloglu), in preparation.
  75. "Abelian Subalgebras and Ideals of Maximal Dimension in Supersolvable and Nilpotent Lie Algebras, in preparation.
  76. "Quasi-ideals of Leibniz algebras", in preparation
  77. "Closure Operations and Classes of algebras" (jointly with Ismael Gutierrez-Garcia and Anselmo Torresblanca-Badillo), in preparation
  78. "Modularity conditions for Leibniz algebras" (jointly with Salvatore Siciliano), in preparation