

CURRICULUM VITAE

Efim Zelmanov

Professor of Mathematics

Education

Ph.D. Mathematics, Novosibirsk University, 1981

M.S. Mathematics, Novosibirsk University, 1977.

Biography

Professor Zelmanov received his PhD in Mathematics from Novosibirsk State University in 1980 and his M.S. from Novosibirsk State University in 1977. He is an expert in Algebra. Professor Zelmanov was appointed as the Rita L. Atkinson Chair in Mathematics at UCSD in 2002. His honors include: Fields Medal, August 1994; American Academy of Arts and Sciences, 1996 and the U.S. National Academy, 2001; Foreign member of the Spanish Royal Academy of Sciences, 1997 and of the Korean Academy of Sciences and Technology, 200*; Honorary Doctor, Hagen, 1997 and Oviedo, 2007. Before his appointment at the UCSD Professor Zelmanov was a Professor at Yale University, 1995-2002, University of Chicago, 1994-1995, University of Wisconsin - Madison, 1990-1994, Institute of Mathematics of the Academy of Sciences of the USSR, 1980-present.

Awards

Foreign Member of the Korean Academy of Science

Andre Aizenstadt Prize

Member of the National Academy of Sciences

Foreign Member of the Royal Academy of Spain

Fellow of the American Academy of Arts and Sciences

Fields Medal

College de France Medal

Fellow of the American Mathematical Society (AMS)

Foreign member of the Brazilian Academy of Sciences

REFERENCES

1. S. I. Adyan, E. I. Zel'manov, G. A. Margulis, S. P. Novikov, A. S. Rapinchuk, L. D. Faddeev, and V. I. Yanchevskii, *Vladimir Petrovich Platonov (on the occasion of his sixtieth birthday)*, Uspekhi Mat. Nauk **55** (2000), no. 3(333), 197–204. MR 1777370 (2001d:01020)
2. Adel Alahmadi, Hamed Alsulami, S. K. Jain, and Efim Zelmanov, *Leavitt path algebras of finite Gelfand-Kirillov dimension*, J. Algebra Appl. **11** (2012), no. 6, 1250225, 6. MR 2997464
3. Adel Alahmadi, Hamed Alsulami, Surender Jain, and Efim I. Zelmanov, *Structure of Leavitt path algebras of polynomial growth*, Proc. Natl. Acad. Sci. USA **110** (2013), no. 38, 15222–15224. MR 3153959
4. Y. Barnea, A. Shalev, and E. I. Zelmanov, *Graded subalgebras of affine Kac-Moody algebras*, Israel J. Math. **104** (1998), 321–334. MR 1622319 (99d:17025)

5. Georgia Benkart and Efim Zelmanov, *Lie algebras graded by root systems*, Non-associative algebra and its applications (Oviedo, 1993), Math. Appl., vol. 303, Kluwer Acad. Publ., Dordrecht, 1994, pp. 31–38. MR 1338154 (96h:17040)
6. ———, *Lie algebras graded by finite root systems and intersection matrix algebras*, Invent. Math. **126** (1996), no. 1, 1–45. MR 1408554 (97k:17044)
7. V. V. Benyash-Krivets, A. B. Zhizhchenko, E. I. Zel'manov, and et al., *Vladimir Petrovich Platonov (on the occasion of his seventieth birthday)*, Uspekhi Mat. Nauk **65** (2010), no. 3(393), 203–206. MR 2682729
8. M. Cabrera García, A. Moreno Galindo, A. Rodríguez Palacios, and E. I. Zel'manov, *Jordan polynomials can be analytically recognized*, Studia Math. **117** (1996), no. 2, 137–147. MR 1367441 (96k:46087)
9. Antonio Giambruno and Efim Zelmanov, *On growth of codimensions of Jordan algebras*, Groups, algebras and applications, Contemp. Math., vol. 537, Amer. Math. Soc., Providence, RI, 2011, pp. 205–210. MR 2799101 (2012f:17050)
10. Daniel Goldstein, Robert M. Guralnick, Lance Small, and Efim Zelmanov, *Inversion invariant additive subgroups of division rings*, Pacific J. Math. **227** (2006), no. 2, 287–294. MR 2263018 (2007i:17041)
11. Robert M. Guralnick, Lance W. Small, and Efim Zelmanov, *Nil subrings of endomorphism rings of finitely generated modules over affine PI-rings*, J. Algebra **324** (2010), no. 11, 3044–3047. MR 2732987 (2011i:16039)
12. V. G. Kac, C. Martinez, and E. Zelmanov, *Graded simple Jordan superalgebras of growth one*, Mem. Amer. Math. Soc. **150** (2001), no. 711, x+140. MR 1810856 (2001k:17052)
13. Alexander Lubotzky and Efim Zelmanov, *Dimension expanders*, J. Algebra **319** (2008), no. 2, 730–738. MR 2381805 (2008k:05098)
14. C. Martinez and E. Zelmanov, *Jordan algebras of Gel'fand-Kirillov dimension one*, J. Algebra **180** (1996), no. 1, 211–238. MR 1375577 (96m:17057)
15. ———, *Products of powers in finite simple groups*, Israel J. Math. **96** (1996), no. part B, 469–479. MR 1433702 (97k:20050)
16. ———, *Simple finite-dimensional Jordan superalgebras of prime characteristic*, J. Algebra **236** (2001), no. 2, 575–629. MR 1813492 (2002e:17042)
17. C. Martínez and E. Zelmanov, *Specializations of Jordan superalgebras*, RACSAM. Rev. R. Acad. Cienc. Exactas Fís. Nat. Ser. A Mat. **95** (2001), no. 1, 1–6. MR 1899347 (2003c:17043)
18. Consuelo Martínez, Ivan Shestakov, and Efim Zelmanov, *Jordan superalgebras defined by brackets*, J. London Math. Soc. (2) **64** (2001), no. 2, 357–368. MR 1853456 (2002g:17045)
19. ———, *Jordan bimodules over the superalgebras $P(n)$ and $Q(n)$* , Trans. Amer. Math. Soc. **362** (2010), no. 4, 2037–2051. MR 2574886 (2010k:17046)
20. Consuelo Martínez and E. Zelmanov, *Simple and prime graded Jordan algebras*, J. Algebra **194** (1997), no. 2, 594–613. MR 1467168 (98h:17035)
21. Consuelo Martínez and Efim Zelmanov, *Nil algebras and unipotent groups of finite width*, Adv. Math. **147** (1999), no. 2, 328–344. MR 1734527 (2001b:17038)
22. ———, *Specializations of Jordan superalgebras*, Canad. Math. Bull. **45** (2002), no. 4, 653–671, Dedicated to Robert V. Moody. MR 1941232 (2003k:17040)
23. ———, *A Kronecker factorization theorem for the exceptional Jordan superalgebra*, J. Pure Appl. Algebra **177** (2003), no. 1, 71–78. MR 1948839 (2003k:17041)
24. ———, *Unital bimodules over the simple Jordan superalgebra $D(t)$* , Trans. Amer. Math. Soc. **358** (2006), no. 8, 3637–3649 (electronic). MR 2218992 (2007b:17048)
25. ———, *Jordan superalgebras and their representations*, Algebras, representations and applications, Contemp. Math., vol. 483, Amer. Math. Soc., Providence, RI, 2009, pp. 179–194. MR 2497959 (2010d:17038)
26. ———, *Representation theory of Jordan superalgebras. I*, Trans. Amer. Math. Soc. **362** (2010), no. 2, 815–846. MR 2551507 (2011a:17049)
27. Consuelo Martínez and Efim I. Zelmanov, *Lie superalgebras graded by $P(n)$ and $Q(n)$* , Proc. Natl. Acad. Sci. USA **100** (2003), no. 14, 8130–8137 (electronic). MR 1989345 (2005c:17047)
28. F. Montaner, A. Stolin, and E. Zelmanov, *Classification of Lie bialgebras over current algebras*, Selecta Math. (N.S.) **16** (2010), no. 4, 935–962. MR 2734334 (2011k:17042)
29. J. Marshall Osborn and Efim Zelmanov, *Nonassociative algebras related to Hamiltonian operators in the formal calculus of variations*, J. Pure Appl. Algebra **101** (1995), no. 3, 335–352. MR 1348574 (96h:17001)
30. Victor M. Petrogradsky, Ivan P. Shestakov, and Efim Zelmanov, *Nil graded self-similar algebras*, Groups Geom. Dyn. **4** (2010), no. 4, 873–900. MR 2727670 (2011i:17028)
31. M. L. Racine and E. I. Zel'manov, *Simple Jordan superalgebras*, Non-associative algebra and its applications (Oviedo, 1993), Math. Appl., vol. 303, Kluwer Acad. Publ., Dordrecht, 1994, pp. 344–349. MR 1338205 (96g:17035)
32. ———, *Simple Jordan superalgebras with semisimple even part*, J. Algebra **270** (2003), no. 2, 374–444. MR 2019625 (2005b:17063)
33. Leonard Scott, Ronald Solomon, John Thompson, John Walter, and Efim Zelmanov, *Walter Feit (1930–2004)*, Notices Amer. Math. Soc. **52** (2005), no. 7, 728–735. MR 2159686
34. A. Shalev and E. I. Zelmanov, *Narrow algebras and groups*, J. Math. Sci. (New York) **93** (1999), no. 6, 951–963, Algebra, 11. MR 1698764 (2000i:17008)
35. Aner Shalev and Efim I. Zelmanov, *Narrow Lie algebras: a coclass theory and a characterization of the Witt algebra*, J. Algebra **189** (1997), no. 2, 294–331. MR 1438178 (98d:17032)
36. I. P. Shestakov and E. Zelmanov, *Some examples of nil Lie algebras*, J. Eur. Math. Soc. (JEMS) **10** (2008), no. 2, 391–398. MR 2390328 (2009c:17031)
37. Lance W. Small and Efim I. Zelmanov, *On point modules*, Publ. Math. Debrecen **69** (2006), no. 3, 387–390. MR 2273992 (2007g:16032)

38. Michael Vaughan-Lee and E. I. Zelmanov, *Upper bounds in the restricted Burnside problem. II*, Internat. J. Algebra Comput. **6** (1996), no. 6, 735–744. MR 1421888 (98c:20063)
39. Michael Vaughan-Lee and E. I. Zel'manov, *Bounds in the restricted Burnside problem*, J. Austral. Math. Soc. Ser. A **67** (1999), no. 2, 261–271, Group theory. MR 1717419 (2000i:20053)
40. È. B. Vinberg, E. S. Golod, E. I. Zel'manov, and et al., *Aleksei Ivanovich Kostrikin [1929–2000]*, Uspekhi Mat. Nauk **56** (2001), no. 3(339), 143–145. MR 1859725
41. E. Zel'manov, *More on Burnside's problem*, Combinatorial and geometric group theory (Edinburgh, 1993), London Math. Soc. Lecture Note Ser., vol. 204, Cambridge Univ. Press, Cambridge, 1995, pp. 314–321. MR 1320294 (96k:20080)
42. E. Zelmanov, *On groups satisfying the Golod-Shafarevich condition*, New horizons in pro- p groups, Progr. Math., vol. 184, Birkhäuser Boston, Boston, MA, 2000, pp. 223–232. MR 1765122 (2002f:20037)
43. ———, *Idempotents in conformal algebras*, Proceedings of the Third International Algebra Conference (Tainan, 2002), Kluwer Acad. Publ., Dordrecht, 2003, pp. 257–266. MR 2026582 (2004m:16042)
44. E. I. Zel'manov, *Lie ring methods in the theory of nilpotent groups*, Groups '93 Galway/St. Andrews, Vol. 2, London Math. Soc. Lecture Note Ser., vol. 212, Cambridge Univ. Press, Cambridge, 1995, pp. 567–585. MR 1337299 (96i:20048)
45. Efim Zelmanov, *On some open problems related to the restricted Burnside problem*, Recent progress in algebra (Taejon/Seoul, 1997), Contemp. Math., vol. 224, Amer. Math. Soc., Providence, RI, 1999, pp. 237–243. MR 1654995 (99k:20082)
46. ———, *On the structure of conformal algebras*, Combinatorial and computational algebra (Hong Kong, 1999), Contemp. Math., vol. 264, Amer. Math. Soc., Providence, RI, 2000, pp. 139–153. MR 1800693 (2001j:17048)
47. ———, *Infinite algebras and pro- p groups*, Infinite groups: geometric, combinatorial and dynamical aspects, Progr. Math., vol. 248, Birkhäuser, Basel, 2005, pp. 403–413. MR 2195460 (2006k:20053)
48. ———, *Some open problems in the theory of infinite dimensional algebras*, J. Korean Math. Soc. **44** (2007), no. 5, 1185–1195. MR 2348741 (2008g:16053)
49. ———, *On Isaiah Kantor (1936–2006)*, J. Gen. Lie Theory Appl. **2** (2008), no. 3, 111. MR 2434996
50. Efim I. Zelmanov, *On the restricted Burnside problem*, Fields Medallists' lectures, World Sci. Ser. 20th Century Math., vol. 5, World Sci. Publ., River Edge, NJ, 1997, pp. 623–632. MR 1622930 (99d:20061)