E_6型Weyl群中左胞腔的左连通性

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Left-connectedness of left cells in the Weyl Group of type E_6

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摘要 首先通过计算机编程找出~E_{6}~型~Weyl~群左胞腔的所有极短元, 利用这些极短元证明了~E_6~型~Weyl~群的所有左胞腔都是左连通的, 从而证明了~Lusztig~关于左胞腔左连通性的一个猜想在~E_6~型~Weyl~群中是成立的.

关键词: Weyl~群   左胞腔   双边胞腔   左连通性

Abstract: We showed that all the left cells in the Weyl group E_{6} were left-connected, verifying a conjecture of Lusztig in our case.

Key words: Weyl group   left cells   two-sided cells   left-connectedness

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. Left-connectedness of left cells in the Weyl Group of type E_6[J]. Journal of East China Normal University(Natural Sc, 2013, 2013(1): 76-90.

[1]   {1}

[2]   KAZHDAN D, LUSZTIG G. Representation of Coxeter groups and Hecke

[3]   algebras[J]. Invent Math 1979, 53: 165-184.

[4]   {2}

[5]   ASAI T, KAWANAKAN, SPALTENSTEIN N, et al. Open Problems in algebraic

[6]   Groups [C]// Problems from the Conference on Algebraic Groups and

[7]   Representations Held at Katata. Katata: Taniguchi Foundation, 1983.

[8]   {3}

[9]   SHI J Y. The Kazhdan-Lusztig cells in certain affine Weyl

[10]   groups[M]. Lecture Notes in Math 1179. Berlin: Springer, 1986.

[11]   {4}

[12]   SHI J Y. A two-sided cell in an affine Weyl group, II[J]. J London

[13]   Math Soc, 1988, 37(2): 253-264.

[14]   {5}

[15]   SHI J Y. Left cells containing a fully commutative element[J]. J

[16]   Comb Theory Series A, 2005, 113: 556-565.

[17]   {6}

[18]   SHI J Y. Left-connectedness of some left cells in certain Coxeter

[19]   groups of simply-laced type[J]. J Algebra, 2008, 319(6): 2410-2413.

[20]   {7}

[21]   TONG C Q. Left cells in Weyl group of type E_6[J]. Comm in

[22]   Algebra, 1995, 23(13): 5031-5047.

[23]   {8}

[24]   SHI J Y. A new algorithm for finding an l.c.r set in certain

[25]   two-sided cells[J]. Pacific J Math, 2012, 256(1): 235--252.

[26]   {9}

[27]   LUSZTIG G. Cells in affine Weyl group [C]// Algebraic Groups and

[28]   Related Topics. Advanced Studies in Pure Math, 1985, 6: 255-287.

[29]   {10}

[30]   BARBASCH D, VOGAN D. Primitive ideals and orbital integrals in

[31]   complex classical groups[J]. Math Ann, 259: 153-199.

[32]   {11}

[33]   BARBASCH D, VOGAN D. Primitive ideals and orbital integrals in

[34]   complex exceptional groups[J]. J Algebra, 1983, 80: 350-382.

[35]   {12}

[36]   LUSZTIG G. Characters of Reductive Groups over a Finite Field [M].

[37]   Ann Math Studies 107, Princeton: Princeton University Press, 1984.

[38]   {13}

[39]   LUSZTIG G. Cells in affine Weyl group, IV [J]. J Fac Fci Univ Tokyo

[40]   Sect IA Math, 1989, 36: 297-328.

[41]   {14}

[42]   SHI J Y. Left cells in affine Weyl groups[J] T$\ddot{o}$hoku J.

[43]   Math, 1994, 46: 105-124.

[44]   {15}

[45]   CARTER R W. Finite Groups of Lie Type: Conjugacy Classes and Complex

[46]   Characters[M]. Wiley Series in Pure and Applied Mathematics. London:

[47]   John Wiley, 1985.

[1]   岳明仕. 拟分裂情形下仿射\,Weyl 群\,$\widetilde{\bm C}_{\bm 4}$~的胞腔[J]. 华东师范大学学报(自然科学版), 2013, 2013(1): 61-75.

[2]   黄 谦. 加权的~Coxeter~群~$\widetilde{\bm C}_{\bm n}$~的左胞腔[J]. 华东师范大学学报(自然科学版), 2013, 2013(1): 91-103, 114.