List of publications

Luca Giuzzi

Tuesday 9th June, 2020

1 Accepted papers

1. L. Giuzzi, "Collineation groups of the intersection of two classical unitals", J. Comb. Des. 9: 445–459 (2001) ISSN: 1063-8539, doi:10.1002/jcd.1023.

2. L. Giuzzi, H. Karzel, "Co-Minkowski spaces, their reflection structure and K-loops", Discrete Math. 255: 161–179 (2002), ISSN: 0012-365X, doi:10.1016/S0012-365X(01)00396-X.

3. L. Giuzzi, "A characterisation of classical unitals", J. Geom., 74: 86–89 (2002), ISSN: 0047-2468, doi:10.1007/PL00012541.

4. L. Giuzzi, G. Korchmáros, "Ovoids of the Hermitian Surface in Odd Characteristic", Adv. Geom., Special Issue (2003), S49–S58, ISSN: 1615-715X.

5. L. Giuzzi, "On the intersection of Hermitian surfaces", J. Geom., 85: 49–60 (2006), ISSN: 0047-2468, doi:10.1007/s00022-006-0042-4.

6. L. Giuzzi, "A geometric construction for some ovoids of the Hermitian Surface", Results Math. 49: 81–88 (2006), ISSN: 1422-6383, doi:10.1007/s00025-006-0210-8.

7. A. Aguglia, L. Giuzzi, "Orthogonal arrays from Hermitian varieties", Innov. Incidence Geom. 5: 129–144 (2007), ISSN: 1781-6475 (arxiv:0705.3590).

8. A. Aguglia, L. Giuzzi, "Construction of a 3–dimensional MDS code", Contrib. Discrete Math. 3 (1), 39–46 (2007), ISSN: 1715-0868, doi:10.1007/s00025-007-0268-y (arxiv:0708.1558).

9. A. Aguglia, L. Giuzzi, "An algorithm for constructing some maximal arcs in PG$(2, q^2)$", Results Math. 52 no. 1–2: 17–33 (2008), ISSN: 1422-6383, doi:10.1007/s00025-007-0268-y (arxiv:math/0611466).

10. A. Aguglia, L. Giuzzi, G. Korchmáros, "Algebraic curves and maximal arcs", J. Algebraic Combin. 28: 531–544 (2008), ISSN: 0925-9899, doi:10.1007/s10801-008-0122-7 (arxiv:math/0702770).

11. A. Aguglia, L. Giuzzi, "On the non–existence of certain hyperovals in dual André planes of order 2^{2k}", Electron. J. Combin. 15(1): N37 (2008); (arxiv:0803.1597).

12. L. Giuzzi, A. Sonnino, "LDPC codes from Singer cycles", Discrete Appl. Math. 157: 1723–1728 (2009), ISSN: 0166-218X, doi:10.1016/j.dam.2009.01.013 (arxiv:0709.2813).

13. A. Aguglia, L. Giuzzi, G. Korchmáros, "Construction of unitals in Desarguesian planes", Discrete Math. 310 (22): 3162–3167 (2010), ISSN: 0012-365X, doi:10.1016/j.disc.2009.06.023 (arxiv:0810.2233).

14. L. Giuzzi, A. Pasotti, "Sampling complete graphs", Discrete Math. 312 (3), 488–497 (2012), ISSN: 0012-365X, doi:10.1016/j.disc.2011.02.034 (arxiv:0907.3199).

15. L. Giuzzi, G. Korchmáros, "Unitals in $PG(2, q^2)$ with a large 2-point stabiliser, Discrete Math. 312 (3): 532–535 (2012), ISSN: 0012-365X doi:10.1016/j.disc.2011.03.017 (arxiv:1009.6109).

16. A. Benini, L. Giuzzi, A. Pasotti, "Down-linking (K_v, Γ)–designs to P_3–designs", Util. Math. 90: 3–21 (2013) ISSN: 0315-3681 (arxiv:1004.4127).

17. A. Benini, L. Giuzzi, A. Pasotti, "New results on path-decompositions and their down-links", Util. Math. 90: 369–382 (2013) ISSN: 0315-3681 (arxiv:1106.1095).

18. L. Giuzzi, V. Pepe, "Families of twisted tensor product codes", Des. Codes Cryptogr. 67: 375–384 (2013) ISSN: 0925-1022 doi:10.1007/s10623-012-9613-6 (arxiv:1107.1066).

19. I. Cardinali, L. Giuzzi, "Codes and caps from orthogonal Grassmannians ", Finite Fields Appl. 24: 148–169 (2013) ISSN: 1071-5797 doi:10.1016/j.ffa.2013.07.003 (arxiv:1303.5636).

20. A. Aguglia, L. Giuzzi, "Intersections of the Hermitian surface with irreducible quadrics in $PG(3, q^2)$, q odd", Finite Fields Appl. 30: 1–13 (2014) ISSN: 1071-5797 doi:10.1016/j.ffa.2014.05.005 (arxiv:1307.8386).

21. L. Giuzzi, V. Pepe, " On some subvarieties of the Grassmann variety", Linear Multilinear Algebra 63 (11): 2121–2134 (2015) ISSN: 0308-1087 doi:10.1080/03081087.2014.983449 (arxiv:1405.6926).

22. I. Cardinali, L. Giuzzi, "Minimum distance of Symplectic Grassmann Codes", Linear Algebra Appl. 488: 124–134 (2016) ISSN: 0024-3795 doi:10.1016/j.laa.2015.09.031 (arxiv:1503.05456).

23. I. Cardinali, L. Giuzzi, K.V. Kaipa, A. Pasini, "Line Polar Grassmann Codes of Orthogonal Type", J. Pure Appl. Algebra 220 (5): 1924-1934 (2016) ISSN: 0022-4049 doi:10.1016/j.jpaa.2015.10.007.

24. A. Aguglia, L. Giuzzi, "Intersections of the Hermitian Surface with irreducible Quadrics in even Characteristic", Electron. J. Combin. 23 (4): P4.13 (2016) (arxiv:1407.8498).

25. A. Aguglia, L. Giuzzi, "Intersection sets, three-character multisets and associated codes", Des. Codes Cryptogr. 83: 269-282 (2017) doi:10.1007/s10623-016-0302-8 (arxiv:1504.00503).

26. I. Cardinali, L. Giuzzi, A. Pasini, "A geometric approach to alternating k-linear forms", J. Algebraic Combin. 45: 931-963 (2017) doi:10.1007/s10801-016-0730-6 (arxiv:1601.08115).

27. I. Cardinali, L. Giuzzi, "Enumerative Coding for Line Polar Grassmannians with Applications to Codes", Finite Fields Appl. 46: 107-138 (2017) doi:10.1016/j.ffa.2017.03.005 (arxiv:1412.5466).

28. I. Cardinali, L. Giuzzi, A. Pasini, "On transparent embeddings of point-line geometries", J. Combin. Theory Series A 155: 190-224 (2018) doi:10.1016/j.jcta.2017.11.001 (arxiv:1611.07877).

29. I. Cardinali, L. Giuzzi, "Minimum distance of Line Orthogonal Grassmann Codes in even characteristic", J. Pure Applied Algebra 222: 2975-2988 (2018) doi:10.1016/j.jpaa.2017.11.009 (arxiv:1605.09333).

30. I. Cardinali, L. Giuzzi, " Line Hermitian Grassmann Codes and their Parameters", Finite Fields Appl. 51: 407-432 (2018) doi:10.1016/j.ffa.2018.02.006 (arxiv:1706.10255).

31. L. Giuzzi, F. Zullo, "Identifiers for MRD-codes", Linear Algebra appl. 575: 66-86 (2019) doi:10.1016/j.laa.2019.03.030 (arxiv:1807.09476).

32. I. Cardinali, L. Giuzzi, "Geometries arising from trilinear forms on low-dimensional vector spaces", Adv. Geom. 19: 269-290 (2019) doi:10.1515/advgeom-2018-0027 (arxiv:1703.06821).

33. I. Cardinali, L. Giuzzi, "Implementing Line-Hermitian Grassmann codes", Linear Algebra Appl. 580: 96-120 (2019) doi:10.1016/j.laa.2019.06.020 (arxiv:1804.03024).

34. I. Cardinali, L. Giuzzi, A. Pasini, "Grassmann embeddings of polar Grassmannians", J. Combin. Theory Series A 170: 105-133 (2020) doi:10.1016/j.jcta.2019.105133 (arxiv:1810.12811).

2 Preprints

1. A. Aguglia, L. Giuzzi, M. Homma, "On Hermitian varieties in PG$(6, q^2)$, (arxiv:2006.04099).

2. I. Cardinali, L. Giuzzi, M. Kwiatkowski, "On the Grassmann Graph of Linear Codes", (arxiv:2005.04402).

3. I. Cardinali, L. Giuzzi, A. Pasini, "Generation of J-Grassmannians of buildings of type A_n and D_n with J a non-connected set of types", (arxiv:1912.03484).

4. I. Cardinali, L. Giuzzi, A. Pasini, "The generating rank of a polar Grassmannian", (arxiv:1906.10560).

5. L. Giuzzi, A. Sonnino, "Alcune note introduttive sulla crittografia", Quaderno del seminario matematico di Brescia n. 01/2006.

6. L. Giuzzi, "Looking for ovoids of the Hermitian surface: a computational approach", Quaderno del seminario matematico di Brescia n. 33/2002, (arxiv:1210.2600).

7. L. Giuzzi, "Intersections of Hermitian surfaces/2: matrices", Quaderno del seminario matematico di Brescia n. 14/2001.

8. L. Giuzzi, "Intersections of Hermitian surfaces/1: configurations", Quaderno del seminario matematico di Brescia n. 11/2001.

9. L. Giuzzi, "Size of Hermitian intersections", Quaderno del seminario matematico di Brescia n. 07/2001.

10. J.W.P. Hirschfeld, "Algebraic Geometry over a Field of Positive Characteristic - Appunti curati dal dott. L. Giuzzi", Quaderno del seminario matematico di Brescia n. 16/98.

3 Books

1. L. Giuzzi, "Hermitian varieties over finite fields", DPhil thesis under the supervision of Prof. J.W.P. Hirschfeld (University of Sussex).

2. L. Giuzzi, "Codici correttori", UNITEXT Springer Verlag **27** (2006), ISBN: 88–470–0539–6.

4 Proceedings/Extended Abstracts

1. I. Cardinali, L. Giuzzi, "Some results on caps and codes related to orthogonal Grassmannians – a preview", Electron. Notes Discrete Math. 40, 139–144 (2013) ISSN: 1571-0653, doi:10.1016/j.endm.2013.05.026.

2. I. Cardinali, L. Giuzzi, "Polar Grassmannians and their Codes", Extended Abstract accepted for the MEGA2015 conference (2015),(arxiv:1509.07686).

5 Other printed works

1. L. Giuzzi, "Gruppi di Frobenius e strutture geometriche associate" (Frobenius groups and associated geometrical structures, in Italian): *tesi di laurea* at Università Cattolica di Brescia, under the supervision of Prof. S. Pianta.