

Literaturverzeichnis

- [1] ANDRÉ, J.: Über nicht-Desarguessche Ebenen mit transitiver Translationsgruppe. In: *Math. Z.* 60 (1954), S. 156–186
- [2] ASSAF, A.M. ; HARTMAN, A.: Resolvable group divisible designs with block size 3. In: *Discrete Math.* 77 (1989), S. 5–20
- [3] BENZ, W.: *Vorlesungen über Geometrie der Algebren*. Springer-Verlag, Berlin-Heidelberg-New York, 1973
- [4] BETH, T. ; JUNGNICKEL, D. ; LENZ, H.: *Design Theorie*. Cambridge Univ. Press., Cambridge 1986
- [5] BETH, T. ; JUNGNICKEL, D. ; LENZ, H.: *Design Theorie I,II*. Cambridge Univ. Press., Cambridge 1999
- [6] BIGGS, N.L.: T.P. Kirkman, mathematician. In: *Bull. Lond. Math. Soc.* 13 (1981), S. 97–120
- [7] BLAKE-WILSON, S. ; PHELPS, K.T.: Constant weight codes and group divisible designs. In: *Designs, Codes and Cryptography* 16 (1999), S. 11–27
- [8] BLASCHKE, W.: Über die Laguerresche Geometrie der Speere in der Euklidischen Ebene. In: *Mh. Math. Phys.* 21 (1910), S. 3–60
- [9] BOSE, R.C.: A note on the resolvability of balanced incomplete block designs. In: *Sankhya* 6 (1942), S. 105–110
- [10] CAO, H. ; LEI, J. ; ZHU, L.: *Constructions of large sets of disjoint group-divisible designs $LS(2^n4^1)$ using a generalization of $*LS(2^n)$* . – Preprint
- [11] CAO, H. ; LEI, J. ; ZHU, L.: Large sets of disjoint group-divisible designs with block size three and type 2^n4^1 . In: *J. Combin. Designs* 9 (2001), S. 285–296
- [12] CAO, H. ; LEI, J. ; ZHU, L.: Further results on large sets of disjoint group-divisible designs with block size three and type 2^n4^1 . In: *J. Combin. Designs* 11 (2003), S. 24–35
- [13] CAYLEY, A.: On the triadic arrangements of seven and fifteen things. In: *Philos. Mag.* 37 (1850), S. 50–53
- [14] CERRONI, C. ; SCHULZ, R.-H.: Divisible designs admitting $GL(3, q)$ as an automorphism group. In: *Geometriae Dedicata* 83 (2000), S. 343–350

- [15] CERRONI, C. ; SCHULZ, R.-H.: Divisible designs admitting, as an automorphism group, an orthogonal group or a unitary group. In: JUNG-NICKEL, Dieter (Hrsg.) u. a.: *Finite fields and applications* Proc. Fifth. Internat. Conf. on Finite Fields and Applications, Springer-Verlag, Berlin, 2001, S. 95–108
- [16] CERRONI, C. ; SPERA, A.G.: On divisible designs and twisted field planes. In: *J. Combin. Designs* 7 (1999), S. 453–464
- [17] CHANG, Yanxun ; MIAO, Ying: General constructions for double group divisible designs and double frames. In: *Designs, Codes and Cryptography* 26 (2002), S. 155–168
- [18] CHEN, D. ; LINDNER, C.C. ; STINSON, D.R.: Further results on large sets of disjoint group-divisible designs. In: *Discrete Math.* 110 (1992), S. 35–42
- [19] CHEN, D. ; STINSON, D.R.: On the construction of large sets of disjoint group-divisible designs. In: *Ars Combinatoria* 35 (1993), S. 103–115
- [20] COLBOURN, C.J. (Hrsg.) ; DINITZ, J.H. (Hrsg.): *The CRC Handbook of Combinatorial Designs*. CRC Press, 1996. – Boca Raton
- [21] CZERWINSKI, T.: Finite translation planes with collineation groups doubly transitive on the points at infinity. In: *J. Algebra* 22 (1972), S. 428–441
- [22] DAS, P.K. ; ROSA, A.: Halving Steiner triple systems. In: *Discrete Math.* 109 (1992), Nr. 1-3, S. 59–67
- [23] DINITZ, J.H. (Hrsg.) ; STINSON, D.R. (Hrsg.): *Contemporary Design Theory, A Collection of Surveys*. Wiley-Interscience Publication, New York, 1992
- [24] ETZION, T.: Optimal constant weight codes over \mathbb{Z}_k and generalized designs. In: *Discrete Mathematics* 169 (1997), S. 55–82
- [25] FRONČEK, D. ; MESZKA, M.: Halving transversal designs. In: *J. Combin. Designs* 8 (2000), S. 83–99. – Issue 2
- [26] GE, G. ; LAM, C.W.H. ; LING, A.C.H.: Some new uniform frames with block size four and index one or three. In: *J. Combin. Designs* 12 (2004), Nr. 2, S. 112–122

- [27] GE, G. ; LING, A.C.H.: Asymptotic results on the existence of 4-RGDD and uniform 5-GDDs. In: *J. Combin. Designs* 13 (2004), Nr. 3, S. 222–237
- [28] GIESE, S. ; HAVLICEK, H. ; SCHULZ, R.-H.: *Some constructions of divisible designs from Laguerre geometries.* 2005. – Discrete Mathematics, im Druck
- [29] GROPP, H.: The birth of a mathematical theory in British India. In: *Coll. Math. Soc. Janos Bolyai* 60 (1992), S. 315–327
- [30] HANANI, H.: On resolvable balanced incomplete block designs. In: *J. Combin. Theory Ser. A* 17 (1974), S. 275–289
- [31] HARTMAN, A.: Halving the complete design. In: *Ann. Discrete Math.* 34 (1987), S. 353–362
- [32] HARTMAN, A. (Hrsg.): *Annals of Discrete Mathematics (42): Combinatorial Designs.* Elsevier Science Publishers, North-Holland, 1989
- [33] HAVLICEK, H.: *Persönliche Mitteilung.*
- [34] HAVLICEK, H.: *Divisible designs, Laguerre geometry, and beyond.* Summer School on Combinatorial Geometry and Optimisation, 2004. – Brescia, Italy, July 4th-10th,
<http://www.geometrie.tuwien.ac.at/havlicek/publika.html>
- [35] HERZER, H.: Chain geometries. In: BUEKENHOUT, F. (Hrsg.): *Handbook of Incidence Geometry.* Elsevier, 1995, S. 781–842
- [36] HIRSCHFELD, J.W.P.: *Finite Projective Spaces of Three Dimensions.* Oxford University Press, New York, 1985
- [37] HIRSCHFELD, J.W.P.: *Projective Geometries Over Finite Fields.* Clarendon Press, Oxford, 1979
- [38] HOTJE, H.: Einbettung gewisser Kettengeometrien in projektive Räume. In: *Journal of Geometry* 5 (1974), S. 85–94
- [39] HUGHES, D.R.: Combinatorial analysis, t-designs and permutation groups. In: *Proc. Symp. Pure Math.* 6 (1962), S. 39–41
- [40] HUGHES, D.R.: On t-designs and groups. In: *Amer. J. Math.* 87 (1965), S. 761–778

- [41] HUGHES, D.R. ; PIPER, F.C.: *Design theory*. Cambridge University Press, 1985
- [42] HUPPERT, B.: *Endliche Gruppen I*. Springer-Verlag, New York, 1967
- [43] HURD, S.P. ; PUREWAL, T.S. ; SARVATE, D.G.: Faithful enclosings of group divisible designs formed by adding an additional group. In: *Congr. Numerantium* 161 (2003), S. 129–138
- [44] HURD, S.P. ; PUREWAL, T.S. ; SARVATE, D.G.: Minimal enclosing of group divisible designs with block size 3 and group size 2. In: *J. Comb. Math. Comb. Comput.* 46 (2003), S. 205–225
- [45] HURD, S.P. ; SARVATE, D.G.: Embeddings and faithful enclosings of GDDs with a constant number of groups. In: *Australas. J. Comb.* 27 (2003), S. 213–222
- [46] JI, L.: *Existence of large sets of disjoint group-divisible designs with block size three and type (2^n4^1)* . – J. Combin. Design, im Druck
- [47] JIMBO, M. ; MISHIMA, M.: Recursive constructions for cyclic quasiframes and cyclically resolvable cyclic Steiner 2-designs. In: *Discrete Math.* 211 (2000), S. 135–152
- [48] JIMBO, M. ; VANSTONE, S.A.: Recursive constructions for resolvable and doubly resolvable 1-rotational Steiner 2-designs. In: *Utilitas Math.* 26 (1984), S. 45–61
- [49] JUNGNICKEL, D. ; MULLIN, R.C. ; VANSTONE, S.A.: The spectrum of α -resolvable block designs with block size 3. In: *Discrete Math.* 97 (1991), S. 269–277
- [50] JUNGNICKEL, D. ; TONCHEV, V.: Decompositions of difference sets. In: *J. Algebra* 217 (1999), Nr. 1, S. 21–39
- [51] KAGEYAMA, S. ; MIAO, Y.: Some constructions of semiframes. In: *Ars Combinatoria* 43 (1996), S. 17–31
- [52] KAGEYAMA, S. ; MIAO, Y.: Two classes of q -ary codes based on group divisible association schemes. In: *Discrete Math.* 195 (1999), Nr. 1, S. 269–276
- [53] KALLAHER, M.: Translation Planes. In: BUEKENHOUT, F. (Hrsg.): *Handbook of Incidence Geometry*. Elsevier, 1995, S. 781–842

- [54] KASKI, P. ; ÖSTERGÅRD, P.R.J.: There exist non-isomorphic STS(19) with equivalent point codes. In: *J. Comb. Des.* 12 (2004), Nr. 6, S. 443–448
- [55] KIRKMAN, T.P.: On a problem in combinatorics. In: *Cambridge and Dublin Math. J.* 2 (1847), S. 191–204
- [56] KIRKMAN, T.P.: Note on an unanswered prize question. In: *Cambridge and Dublin Math. J.* 5 (1850), S. 255–262
- [57] KIRKMAN, T.P.: Query VI. In: *Lady's and Gentleman's Diary* 147 (1850), S. 48
- [58] KURZWEIL, H. ; STELLMACHER, B.: *Theorie der endlichen Gruppen*. Berlin, Heidelberg : Springer-Verlag, 1998
- [59] LEI, J.: Completing the spectrum for $LGDD(m^v)$.
- [60] LU, J.: An existence theory for resolvable balanced incomplete block designs. In: *Acta Math. Sinica* 27 (1984), S. 458–468
- [61] LU, J.X.: On large sets of disjoint Steiner triple system I, II, III. In: *J. Combin. Theory Ser. A* 34 (1983), S. 140–182
- [62] LU, J.X.: On large sets of disjoint Steiner triple system IV, V, VI. In: *J. Combin. Theory Ser. A* 37 (1984), S. 136–192
- [63] LÜNEBURG, H.: *Die Suzukigruppen und ihre Geometrien*. Springer-Verlag, Berlin Heidelberg New York, 1980
- [64] LÜNEBURG, H.: *Translation Planes*. Springer-Verlag, New York, 1980
- [65] MILLS, W.H.: On the existence of H designs. In: *Congr. Numer.* 79 (1990), S. 129–141
- [66] NURMELA, K.J. ; KAIKKONEN, M.K. ; ÖSTERGÅRD, P.R.J.: New constant weight codes from linear permutation groups. In: *IEEE Trans. Inf. Th.* 43 (1997), Nr. 5, S. 1623–1632
- [67] PHELPS, K. ; YIN, C.: Generalized Steiner systems with block size three and group size $g \equiv 3 \pmod{6}$. In: *J. Combin. Designs* 5 (1997), S. 417–432
- [68] PHELPS, K.T.: Halving block designs with block size four. In: *Australian J. Combin.* 3 (1991), S. 231–234

- [69] PLÜCKER, J.: *System der analytischen Geometrie, auf neue Betrachtungsweisen gegründet und insbesondere eine ausführliche Theorie der Curven dritter Ordnung enthaltend.* Duncker und Humblot, Berlin, 1835
- [70] POTT, A.: Finite geometry and character theory. In: *Lecture Notes in Math.* 1601 (1995)
- [71] RAY-CHAUDHURI, D.K. (Hrsg.): *Coding Theory and Design Theory, Part II.* Springer-Verlag, New York, 1990. – The IMA Volumes in Mathematics and Its Applications, Vol. 21
- [72] RAY-CHAUDHURI, D.K. ; WILSON, R.M.: Solution of Kirkman's school-girl problem. In: MOTZKIN, T. S. (Hrsg.): *Proceedings of the Symposia in Pure Mathematics* Bd. 19. Providence, Rhode Island, 1971, S. 187–203
- [73] REES, R.: An application of partitioned balanced tournament designs to the construction of semiframes with block size two. In: *Ars Combinatoria* 29 (1990), S. 87–95
- [74] REES, R.: Semiframes and nearframes. In: *Combinatorics '88* 2 (1991), S. 359–367. – (Ravello, 1988), Re. Lecture Notes Math., Mediterranean, Rende
- [75] REES, R.: Two new direct-product type constructions for resolvable group divisible designs. In: *J. Combin. Designs* 1 (1993), S. 15–26
- [76] REES, R. ; STINSON, D.R.: On resolvable group-divisible designs with block size three. In: *Ars Combinatoria* 23 (1987), S. 107–120
- [77] RESMINI, M.J. d.: Some partitions of $S(2, 3, v^2)$ and $S(2, 4, v^2)$. In: *Australasian J. Combin.* 10 (1994), S. 289–291
- [78] SCHELLENBERG, P.J. ; STINSON, D.R.: Threshold schemes from combinatorial designs. In: *J. Combin. Math. Combin. Comput.* 5 (1989), S. 143–160
- [79] SCHULZ, R.-H.: Über Translationsebenen mit Kollineationsgruppen, die die Punkte der ausgezeichneten Geraden zweifach transitiv permutieren. In: *Math. Z.* 122 (1971), S. 246–266
- [80] SCHULZ, R.-H.: Constant weight codes and divisible designs with large automorphism Groups. In: *Rendiconti Del Circolo Matematico Di Palermo Serie II* (1998), Nr. 53, S. 173–188

- [81] SCHULZ, R.-H.: *Codierungstheorie - Eine Einführung.* Braunschweig/Wiesbaden : Vieweg Verlag, 2003. – 2. (überarbeitete und erweiterte) Auflage
- [82] SCHULZ, R.-H. ; SPERA, A.G.: Construction of divisible designs from translation planes. In: *Europ. J. Combin.* 19 (1998), Nr. 4, S. 479–486
- [83] SCHULZ, R.-H. ; SPERA, A.G.: Divisible designs admitting a Suzuki group as an automorphism group. In: *Boll. Unione Mat. Ital., Sez. B, Artic. Ric. Mat.* (8)1 (1998), Nr. No. 3, S. 705–714
- [84] SCHULZ, R.-H. ; SPERA, A.G.: Automorphisms of constant weight codes and of divisible designs. In: *Designs, Codes and Cryptography* 20 (2000), Nr. 1, S. 89–97
- [85] SHRIKHANDE, S.S. ; RAGHAVARAO, D.: Affine α -resolvable incomplete block designs. In: *Contributions to statistics.* Pergamon Press, Oxford, 1964, S. 471–480
- [86] SPERA, A.G.: t -Divisible designs from imprimitive permutation groups. In: *Europ. J. Combin.* 13 (1992), S. 409–417
- [87] SPERA, A.G.: On divisible designs and local algebras. In: *Journal of Combinatorial Designs* 3 (1995), Nr. 3, S. 203–212
- [88] SPERA, A.G.: Divisible designs associated with translation planes admitting a 2-transitive collineation group on the points at infinity. In: *Aequationes Math.* 59 (2000), Nr. 1-2, S. 191–200
- [89] STINSON, D.R.: Frames for Kirkman triple systems. In: *Discrete Math.* 65 (1987), S. 289–300
- [90] STINSON, D.R. ; VANSTONE, S.A.: A combinatorial approach to threshold schemes. In: *SIAM J. Discrete Math.* 1 (1988), S. 230–236
- [91] TEIRLINCK, L.: A completion of Lu's determination of the spectrum of large sets of disjoint Steiner triple systems. In: *J. Combin. Theory Ser. A* 57 (1991), S. 302–305
- [92] TEIRLINCK, L.: Large sets with holes. In: *J. Combin. Designs* 1 (1993), S. 69–94
- [93] TEIRLINCK, L.: Some new 2-resolvable Steiner quadruple systems. In: *Des. Codes. Cryptogr.* 4 (1994), S. 5–10

- [94] TEIRLINCK, L.: Large sets of disjoint designs and related structures. In: DINITZ, J.H. (Hrsg.) ; STINSON, D.R. (Hrsg.): *Contemporary Design Theory, A Collection of Surveys*. Wiley-Interscience Publication, New York, 1992
- [95] WANG, Jinhua ; SHEN, Hao: Doyen-Wilson theorem for nested Steiner triple systems. In: *J. Comb. Des.* 12 (2004), Nr. 6, S. 389–403
- [96] WILSON, R.: The early history of block designs. In: *Rend. del Seminario Math. di Messina, Serie II, Tomo XXV* 9 (2003)
- [97] WOOLHOUSE, W.S.B.: Prize question 1733. In: *Lady's and Gentleman's Dairy* (1844)
- [98] ZHANG, Yan ; DU, Beiliang: α -Resolvable group divisible designs with block size three. In: *J. Combin. Designs* 13 (2005), Nr. 2, S. 139–151