

Bibliografia

- [1] Artin E., *Geometric Algebra*, Interscience, 1957.
- [2] Assmus E.F. & Key J.D., *Designs and their Codes*, *Cambridge Tracts in Mathematics*, 103, Cambridge University Press, 1992.
- [3] Barlotti A., *Un' estensione del teorema di Segre - Kustaanheimo*, Boll. U.M.I., 10, Serie III, 498-506, 1955.
- [4] Berardi L., *Algebra e teoria dei codici correttori*, Collana di matematica e statistica, Franco Angeli, 1994.
- [5] Berardi L., Eugeni F., *Blocking sets e teoria dei giochi: origini e problematiche*, Atti Sem. Fis., Univ. Modena, 34, 165-196, 1988.
- [6] Beutelspacher A., *Einführung in die endliche geometrie*, vol.I,II, Wiessensnaftsverlag, 1983.
- [7] Beutelspacher A., Berardi L. *Crittologia*, Collana dei quaderni di informatica, Franco Angeli, 1996.
- [8] Beutelspacher A., Rosenbaum U., *Projective Geometry*, Cambridge University Press, 1998.
- [9] Biggs N.L., White A.T., *Permutation Groups and Combinatorial Structures*, London Mathematical Society, Lecture Note Series, 33, Cambridge University Press, 1979.
- [10] Blokhuis A., *Blocking sets in Desarguesian planes*, Combinatorics, Paul Erdos is Eighty (vol.2), Bolyai Society Mathematical Studies, Keszthely (Ungheria), 1-20, 1993.
- [11] Blokhuis A., Mazzocca F., *On maximal sets of nuclei in $PG(2, q)$ and quasi-odd sets in $AG(2, q)$* , Advances in finite geometries and designs, Oxford University Press, 35-46, 1991.
- [12] Blokhuis A., Mazzocca F., *Special point sets in $PG(n, q)$ and the structure of sets with the maximal number of nuclei*, J. Geom., 41, 33-41, 1991.
- [13] Blokhuis A., Mazzocca F., *Lifts of nuclei in finite projective spaces*, L.M.S. Lecture Note Series, 191, 31-36, 1993.
- [14] Blokhuis A., Wilbrink H.A., *A characterization of exterior lines of certain sets of points in $PG(2, q)$* , Geom. Dedicata, 23, 253-254, 1987.

- [15] Bose R.C., *Mathematical Theory of the Symmetrical Factorial Design*, Sankhya 8, 107-166, 1947.
- [16] Bose R.C., *On some connections between the design of experiments and information theory*, Bull. Inst. Internat. Statist., 38, 257-271, 1964.
- [17] Bose R.C., Parker E.T., Shrikhande S.S., *On the construction of sets of mutually orthogonal Latin squares and the falsity of a conjecture of Euler*, Trans. Amer. Math. Soc., 95, 191-209, 1960.
- [18] Bose R.C., Srivastava J.N., *On a bound useful in the theory of factorial designs and error correcting codes*, Ann. Math. Statist., 35, 408-414, 1964.
- [19] Brouwer A.E., Schrijver A., *The blocking number of an affine space*, J. of Combin. Theory (A), 24, 251-253, 1978.
- [20] Bruck R.H. , Ryser H.J., *The nonexistence of certain finite projective planes*, Canadian Journal of Mathematics, 1, 317-320, 1949.
- [21] Bruen A.A., *Baer subplanes and blocking sets*, Bull. Amer. Math. Soc., 76, 342-344, 1970.
- [22] Bruen A.A., *Blocking sets in finite projective planes*, SIAM J. of Appl. Math., 21, 380-392, 1971.
- [23] Bruen A.A., *Nuclei of sets of $q + 1$ points in $PG(2, q)$ and blocking sets of Rédei type*, J. of Combin. Theory (A), 55, 130-132, 1990.
- [24] Bruen A.A., de Resmini M.J., *Blocking sets in affine planes*, Annals of Discrete Math., 18, 169-176, 1983.
- [25] Bruen A.A., Thas J.A., *Blocking sets*, Geom. Ded., 6, 193-203, 1977.
- [26] Cameron P.J., *Extending symmetric designs*, Journal of Combinatorial Theory (A), 14, 215-220, 1973.
- [27] Cameron P.J., *Finite permutation groups and finite simple groups*, Bull. of London Math. Soc., 13, 1-22, 1981.
- [28] Cameron P.J., *Four lectures on projective geometry*, in Finite Geometries, Lecture Notes in Pure and Applied Mathematics, 103, 27-65, 1985.
- [29] Cameron P.J., van Lint J.H., *Designs, Graphs, Codes and their Links*, London Mathematical Society, Student Texts 22, 1991.
- [30] Cameron P.J., Mazzocca F., *Bijections which preserve blocking sets*, Geom. Dedicata, 21, 219-229, 1986.
- [31] Cerasoli M., Eugeni F., Protasi M., *Elementi di matematica discreta*, Zanichelli, 1988.

- [32] Cherowitzo W., *Hyperovals in Desarguesian planes of even order*, Ann. Discrete Math., 37, 87-94, 1988.
- [33] Coxeter H.S.M., *Projective geometry*, Springer, Second Edition, 1987.
- [34] Chowla S., Ryser H.J., *Combinatorial problems*, Canadian Journal of Mathematics, 2, 93-99, 1950.
- [35] Dembowski P., *Finite geometries*, Springer-Verlag, 1968.
- [36] Di Martino L., *I gruppi di Mathieu*, Note di Matematica, Università di Lecce, Volume IV Numero 2, 1984.
- [37] Euler L., *Recherches sur une nouvelle espece des quarres magiques*, Verh. Zeeuwsch. Genootsch. Wetensch. Vlissingen, 9, 85-239, 1782.
- [38] Euler L., *Le probleme des 36 officiers*, Rend. Soc. Sc. Flessing, vol.IX, 1782.
- [39] Fano G., *Sui postulati fondamentali della geometria proiettiva in uno spazio a un numero qualunque di dimensioni*, Giorn. Mat. Battaglini, 30, 106-132, 1892.
- [40] Fellegara G., *Gli ovaloidi di uno spazio tridimensionale di Galois di ordine 8*, Atti Acc. Naz. Lincei, Rend. Cl. Sci. Mat., Fis., Nat., 32, 170-176, 1962.
- [41] Fisher R.A., *The theory of confounding in factorial experiments in relation to the theory of groups*, Ann. Eugen. London, 11, 341-352, 1942.
- [42] Fisher R.A., *A system confounding for factors with more than two alternatives giving completely orthogonal cubes and higher powers*, Ann. Eugen. London, 12, 283-290, 1945.
- [43] Galois E., *Sur la théorie des nombres*, J. Math. Pures Appl., 11, 398-407, 1846; *Oeuvres math.*, 15-23, Gauthier-Villars, Paris, 1897.
- [44] Golay M.J.E., *Notes on digital coding*, Proceedings of IEEE, 37, 657, 1949.
- [45] Hadamard J., *Résolution d'une question aux déterminants*, Bull. Sci. Math., (2) 17, 240-248, 1893.
- [46] Hamming R.W., *Error detecting and error correcting codes*, Bell Syst. Tech. J., 29, 147-160, 1950.
- [47] Hill R., *On the largest size of cap in $S_{5,3}$* , Atti Accad. Naz. Lincei, Rend. Cl. Sc. Mat., Fis., Nat., 54, 378-384, 1973.
- [48] Hirschfeld J.W.P., *Projective geometries over finite fields*, Oxford University Press, Oxford, 1979.
- [49] Hirschfeld J.W.P., *Finite projective spaces of three dimensions*, Clarendon Press, Oxford, 1985.

- [50] Hughes D.R., *On t -designs and groups*, Amer. J. Math., 87, 761-768, 1965.
- [51] Hughes D.R., Piper F.C., *Projective planes*, Springer Verlag, 1973.
- [52] Hughes D.R., Piper F.C., *Design Theory*, Cambridge University Press, 1988.
- [53] Jamison R., *Covering finite fields with cosets of subspaces*, J. of Combin. Theory (A), 22, 253-266, 1977.
- [54] Kirkman T.P., *On a problem in combinatorics*, Cambridge and Dublin Math. J., 2, 191-204, 1847.
- [55] Kirkman T.P., *Note on an unanswered prize question*, Cambridge and Dublin Math. J., 5, 255-262, 1850.
- [56] Lam C.W.H., Thiel L., Swiercz S., McKay J., *The non-existence of ovals in a projective plane of order 10*, Discrete Math., 45, 319-321, 1983.
- [57] Lam C.W.H., Thiel L., Swiercz S., *The non-existence of finite projective planes of order 10*, Canad. J. Math., 41, 1117-1123, 1989.
- [58] L.Lunelli, M.Sce, *k -Archi completi nei piani proiettivi desarguesiani di rango 8 e 16*. Centro di Calcoli numerici, Politecnico di Milano, 1958.
- [59] Magliveras S.S., Leavitt D.W., *Simple six designs exist*, Proceedings of the 14th Southeastern Conference on Combinatorics, Graph Theory, Computing, Congr. Num. 40, Utilitas Math., Winnipeg, 195-205, 1983.
- [60] Mathieu E., *Memoires sur l'étude des fonctions de plusieurs quantités*, J. Math. p. et a., 6, 241-323, 1861.
- [61] Mathieu E., *Sur la fonction cinq fois transitive de 24 quantités*, J. Math. p. et a., 18, 25-46, 1873.
- [62] Mazzocca F., *Blocking sets with respect to special families of lines and nuclei of θ_n -sets in finite n -dimensional projective and affine spaces*, Mitt. Math. Sem. Giessen, 201, 109-117, 1991.
- [63] von Neumann J., Morgenstern O., *Theory of games and economic behavior*, Princeton, 1947.
- [64] Paley R.E.A.C., *On orthogonal matrices*, J. Math. and Phis., 12, 314-320, 1933.
- [65] Panella G., *Caratterizzazione delle quadriche di uno spazio (tridimensionale) lineare sopra un corpo finito*, Boll. U.M.I., 10, Serie III, 507-513, 1955.
- [66] di Paola J., *On a restricted class of block design games*, Canadian J. Math., 18, 225-236, 1966.

- [67] di Paola J., *On minimum blocking coalitions in small projective games*, SIAM J. of Appl. Math., 17, 378-392, 1969.
- [68] Pellegrino G., *Sul massimo ordine delle calotte in $S_{4,3}$* , Matematiche (Catania), 25, 1-9, 1970.
- [69] Qvist B., *Some remarks concerning curves of the second degree in a finite plane*, Ann. Acad. Sci. Fenn., Ser.A, 134, 1952.
- [70] Ray-Chaudhuri D.K., Wilson D.K., *Solution of Kirkman's school girl problem*, Proc. Symp. in Pure Math., Combinatorics, Amer. Math. Soc., 19, 187-204, 1971.
- [71] Richardson M., *On finite projective games*, Proc. Amer. Math. Soc, 7, 458-465, 1956.
- [72] Scafati M., Tallini G. *Geometria di Galois e teoria dei codici*, CISU, Roma, 1995.
- [73] Segre B., *Lezioni di geometria moderna*, vol.I, Zanichelli, Bologna, 1948.
- [74] Segre B., *Sulle ovali dei piani lineari finiti*, Atti Acc. Naz. Lincei, Rend. Cl. Sci. Mat., Fis., Nat., 17, 141-142, 1954.
- [75] Segre B., *Sui k -archi nei piani di caratteristica due*, Rev. Math. Pures Appl., 2, 289-300, 1957.
- [76] Segre B., *On complete caps and ovaloids in three dimensional Galois spaces of characteristic two*, Acta Arith., 5, 315-332, 1959.
- [77] Segre B., *Le geometrie di Galois*, Ann. Mat. Pura e Appl., 48, 1-97, 1959.
- [78] Segre B., *Lectures on modern geometry*, Ed. Cremonese, Roma, 1961.
- [79] Segre B., *Ovali e curve σ nei piani di Galois di caratteristica due*, Atti Acc. Naz. Lincei, Rend. Cl. Sci. Mat., Fis., Nat., 33, 785-790, 1962.
- [80] Singer J., *A theorem in finite projective geometry and some applications to number theory*, Trans. Amer. Math. Soc., 43, 377-385, 1938.
- [81] Steiner J., *Combinatorische Aufgabe*, Crelle's Journal, vol.XLV, 181-182, 1853.
- [82] Tallini G., *Sulle k -calotte di uno spazio lineare finito*, Ann. Mat., 42, 119-164, 1956.
- [83] Tallini G., *Strutture grafiche proiettive*, Liguori, Napoli, 1973.
- [84] Tallini G., *Teoria dei k -insiemi in uno spazio di Galois. Teoria dei codici correttori*, Quaderno n.64, Sem. Geom. Comb. Dip. Mat. Univ. Roma La Sapienza, 1985.
- [85] Tarry G., *Le probleme des 36 officiers*, C.R. Assoc. Fr. Av. Sci., 1, 122-123, 1900; 2, 170-203, 1901.
- [86] Teirlinck L., *Nontrivial t -designs without repeated blocks exist for all t* , Discrete Mathematics, 65, 301-311, 1987.

- [87] Teirlinck L., *Locally trivial t -designs and t -designs without repeated blocks*, Discrete Mathematics, 77, 345-356, 1989.
- [88] Thas J.A., *Connection between the Grassmannian $G_{k-1;n}$ and the set of the k -arcs of the Galois space $S_{n,q}$* , Rend. Mat., 2, 121-134, 1969.
- [89] Tits J., *Ovoides et groupes du Suzuki*, Arch. Math., 13, 187-198, 1962.
- [90] Tonchev V.D., *Combinatorial Configurations*, Longman Scientific & Technical, 1988.
- [91] Wielandt E., *Finite permutation groups*, Academic Press, 1964.
- [92] Witt E., *Die 5-fach transitiven Gruppen von Mathieu*, Abh. Math. Seminar Hamburg, 12, 256-264, 1938.
- [93] Witt E., *Über Steinersche Systeme*, Abh. Math. Seminar Hamburg, 12, 265-275, 1938.