

Cambridge University Press

978-0-521-11418-9 - The Theory of Finite Linear Spaces: Combinatorics of Points and Lines

Lynn Margaret Batten and Albrecht Beutelspacher

Index

[More information](#)

Notation index

pq	1	b_k	33
v	1	v_r	33
b	1	\bar{s}	49
r_p	2	$\pi(p, L)$	68
k_L	2	$\{0, s, t\}$ -semiaffine	69
K_v	2	$S_{v,t}$	72
(k_1, \dots, k_r) -star	2	$m(L, H)$	96
(k_1, k_2) -cross	3	$\langle X_1, \dots, X_r \rangle$	137
$\langle X \rangle$	3, 7	v_V	137
$\ $	6, 139	b_V	137
$AG(d, n)$	10	v_i	137
$PG(d, n)$	10	b_i	137
$[a]$	12	r'_p	137
$t(v, k, \lambda)$ design	17	$\text{Aut}(S)$	169
$S(2, 3, v)$	18	v_G	170
$(r, 1)$ -design	23	b_G	170
k -arc	28	G_L	175

Cambridge University Press

978-0-521-11418-9 - The Theory of Finite Linear Spaces: Combinatorics of Points and Lines

Lynn Margaret Batten and Albrecht Beutelspacher

Index

[More information](#)

Subject index

- affine plane, 3
- affine space, 6
- antiflag, 169
- arc, 28
- automorphism group, 168
- Baer subplane, 30
- basis, 9
- biaffine plane, 68
- Bundle Theorem, 149
- chain
 - 4-chain, 178
- characterization result, 12
- claw, 97
 - normal, 97
- clique, 97
 - maximal, 97
- complete graph, 2
- cone, 153
- Conway, 16
- degenerate, 7
- degree, 2
- Dembowski order, 13
- Desarguesian space, 10
- design
 - t -(v, k, λ) design, 17
 - (r, l)-design, 23
- dimension, 9
 - d -dimensional, 9, 136
- dual, 8
- embedded, 11
- extended Nwankpa–Shrikhande plane, 19
- extension, 23
 - s times extendible, 23
- Fano plane, 8
- Fano quasi-plane, 92, 119
- flag, 169
- Fundamental Theorem, 15
- generalized projective, 9
- Hering affine plane, 178
- Hermitian unital, 176
- homogeneous, 172, 173
- hyperideal line, 126
- hyperoval, 28
- hyperplane, 9
- i*-line, 2
- i*-point, 2
- i*-space, 137
- i*-subspace, 137
- I*-affine, 68
- I*-semiaffine, 68
- ideal line, point, 126
- inversive plane, 178
- inversive space, 152
- isomorphic, 20
- k*-arc, 28
- knot, 153
- linear space, 1
 - at infinity, 119
 - d -dimensional, 136
 - finite, 1
 - restricted, 119
 - trivial, 1
- locally projective, 146
- Miquelian, 178
- nearfield, 177
- nearfield affine plane, 177
- near-pencil, 2

214

Subject index

- Netto system, 178
- normal, 97
- nucleus space, 153
- Nwankpa plane, 19
- Nwankpa–Shrikhande plane, 18
- orbit, 169
 - line, 169
 - point, 169
- order,
 - of affine plane, 5
 - of affine space, 6
 - of claw, 97
 - of linear space, 13
 - of projective plane, 9
 - of projective space, 10
- parallel, 6
- parallel class, 5
- parallelism, 6
- parameter, 2
- partial plane, 95
- pencil
 - α -pencil, 34
- plane, 9, 138
- plane k -arc, 153
- point at infinity, 10
- projective plane, 7
 - degenerative, 7
- projective space, 9
- pseudo-complement, 22
- π -space, 138
- punctured, 19
- quadric, 153
- elliptic, 153
- hyperbolic, 153
- parabolic, 153
- real line, point, 126
- Ree group, 176
- Ree unital, 177
- restricted, 119
- semiaffine plane, 68
- semiaffinity condition, 12
- space
 - i -space, 137
 - π -space, 138
- square order, 13
- stabilizer, 175
- star, 2
- Steiner triple system, 18
- subplane, 30
- subspace, 9, 136
 - linear subspace, 9
- transitive, 169, 172, 173
 - antiflag, 169
 - flag, 169
 - line, 169
 - point, 169
- triangle, 27
- unital, 31, 176
 - Hermitian, 176
 - Ree, 177
- Veblen–Young axiom, 151