COMBINATORICS '88

PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON INCIDENCE GEOMETRIES AND COMBINATORIAL STRUCTURES

1st volume

Ravello, Italy 23–28 may, 1988

Edited by:

A. Barlotti	*University of Firenze, Italy*
G. Lunardon	*University of Napoli, Italy*
F. Mazzocca	*University of Napoli, Italy*
N. Melone	*University of Napoli, Italy*
D. Olanda	*University of Napoli, Italy*
A. Pasini	*University of Napoli, Italy*
G. Tallini	*University of Roma "La Sapienza", Italy*

TABLE OF CONTENTS

Preface and Acknowledgements v

PART 1
INVITED LECTURES

W. Benz
The Bundle Theorem with its Degenerations in the Geometry of Chains 3

A. Beutelspacher
Geometry from B. Segre's point of view. Variations on a classical theme 15

J. van Bon and A.M. Cohen
Prospective classification of distance–transitive graphs 25

A.A. Bruen
Planes, designs and Galois geometries 39

P.J. Cameron and C.E. Praeger
Partitioning into Steiner systems 61

U. Ott
Generalized n–Gons in Trees 73

K. Strambach
Multiplications with a prescribed group of automorphisms 87

J.A. Thas
Recent results on flocks, maximal exterior sets and inversive planes . . 95

PART 2
CONTRIBUTED PAPERS

L.M. Abatangelo
Sui gruppi delle collineazioni di una fibrazione β–derivata 111

V. Batagelj
Integer Turbine Balancing Problem 125

L. Berardi and A. Bichara
Blocking sets in symmetric 2–(15,7,3) designs 135

M. Biliotti and G. Korchmáros
Some new results on collineations groups preserving an oval of a finite projective plane 159

P. Biondi
{1,2,3}–inversive planes wich are embeddable into an inversive plane 171

T. Bisztriczky and J.W. Lorimer
Axiom systems for affine Klingenberg spaces 185

A. Blokhuis, R. Schmitt and H.W. Wilbrink
On the number of lines in a linear space on $p^2 + p + 1$ points 201

A. Bonisoli
Automorphisms of (B)–geometries 209

A. Bonisoli and W. Heise
QR–codes revisited 221

P.J. Cameron
Quasi–symmetric designs possessing a spread 231

N. Cera, G. Di Biase and F. Eugeni
Reduced blocking sets in affine planes of order five 237

C.J. Colbourn and A. Rosa
Support sizes of λ–factorizations 249

F. De Clerck, H. Gevaert and J.A. Thas
Partial Geometries and Copolar Spaces 267

A. Del Fra and G. Migliori
On sets of odd type in a projective plane of order q 281

M. De Salvo
Hypergroups and algebras 297

P. De Vito and P.M. Lo Re
On a class of linear spaces 311

L. Dubikajtis
Double affine space 329

G.L. Ebert
Some nonreplaceable nests 353

G. Faina
The maximum size of a (Ω, P, Q)–cap in $PG(3,5)$ 373

C. Fiori
Half planes and permutation sets 381

S. Fiorini, G. Lo Faro and L. Puccio
On the density, chromatic number and chromatic index of a graph . . 397

M. Gionfriddo and G. Lo Faro
On maximal partial spread in $S(t, t+1, v)$ having the minimum number of blocks 407

M. Gionfriddo, F. Milazzo and V. Vacirca
On the chromatic number of transitive multipermutation graphs . . . 413

H. Gropp
Configurations and Steiner systems $S(2,4,25)$ II–Trojan configurations n_3 425

W.H. Haemers and E. Spence
On (v,k,λ) graphs and designs without involutions 437

H. Havliceck
On sets of lines corresponding to Affine Spaces 449