

Curriculum Vitae

name		Martin Josef F u n k
born	21 st March 1953	at Erlangen (Germany)
Study at university	1973-1979	Matematics and Physics at the University of Erlangen-Nuremberg (Germany)
PhD thesis	1980	title: Regularität in Benz-Ebenen (supervisors: A. Barlotti, P. Plaumann, and K. Strambach)
academic positions	05.06.79 - 29.02.80	Postdoctoral research fellow, University of Erlangen-Nuremberg
	01.04.80 - 30.09.80	Postdoctoral research fellow, University of Freiburg.Breisgau (Germany)
	01.11.80 - 31.07.81	Postdoctoral research fellow, University of Erlangen-Nuremberg
	01.08.81 - 31.01.82	Scholarship holder of the D.F.G., University of Erlangen-Nuremberg
	01.02.82 - 30.09.82	Scholarship holder of the C.N.R., University of Bologna (Italy)
	01.10.82 - 31.03.83	Scholarship holder of the D.F.G., University of Erlangen-Nuremberg
	01.04.82 - 31.10.83	Research Assitent, University of Erlangen-Nuremberg
	01.11.83 - 09.06.87	Professor on an annual contract basis, Universities of Basilicata (Potenza, Italy) and Salerno (Italy)
	from 10.06.87	Associate Professor, University of Basilicata, tenure from 10.06.90

Research Interests

Finite geometries, graph theory, configurations, partitions.

International Conferences

- “Geometria combinatoria e di incidenza: fondamenti e applicazioni”, Passo della Mendola (TN), 4.7-11.7.1982;
- “Combinatorics ‘84”, Bari, 24-29.9.1984;
- “Combinatorics ‘86”, Passo della Mendola (TN), 30.6-5.7.1986;
- “Web Geometry”, Szeged, Ungheria, 24-28.8.1987;
- XIII Congresso nazionale dell'Unione Matematica Italiana, Torino, 3-9.9.1987;
- “Combinatorics '88”, Ravello, 24-28.5.1988;
- Convegno del G.N.S.A.G.A. (C.N.R.), Trieste, 6-8.10.1988;
- “Grundlagen der Geometrie”, Oberwolfach, Germania, 18-23.12.1988;
- “Combinatorics '90”, Gaeta (LT), 21-26.5.1990;
- “Groups and Geometries”, Willemstad, Curaçao, Antille Olandesi, 5-14.8.1991;
- “Atelier Tissus et Singularités”, Montpellier, Francia, 23-27.9.1991;
- Convegno “Giornate di Geometria Combinatoria”, Perugia, 11-14.3.1992;
- “Combinatorics '94”, Roma & Montesilvano (PE), 10-16.9.1994;

- “Combinatorics '98”, Mondello (PA), 14-20.6.1998;
- “XXXI South-Eastern Conference on Combinatorics, Graph Theory, and Computer Science”, Boca Raton, Florida, USA, 13-17.3.2000;
- “Combinatorics 2000”, Gaeta (LT), 28.5 –3.6.2000;
- “6th International Conference in Graph Theory”, Marseille, Francia, 28.8-1.9.2000;
- “International Symposium on Graphs, Designs, and Applications”, Messina, 30.9-4.10.2003;
- “Combinatorics 2004”, Acireale (CT), 13-18.9.2004;
- “Combinatorics 2006”, Ischia (NA), 25.6-1.7.2006;
- “Combinatorics 2008”, Costermano (VR), 22.6-28.6.2008;
- “Normfest” (“International Conference on Finite Geometry to Honor the Career of Norman L. Johnson on the Occasion of his 70th Birthday”), St Antonio, Texas, USA, 26-29.3.2009;
- “XLI South-Eastern Conference on Combinatorics, Graph Theory, and Computer Science”, Boca Raton, Florida, USA, 8-12.3.2010;
- “Combinatorics 2010”, Verbania (VB), 27.6-3.7.2010;
- “Combinatorics 2012”, Perugia (PG), 9.9-15.9.2012;
- “9th International Colloquium on Graph Theory and Combinatorics”, Grenoble, Francia, 30.6-4.7.2014.

“NATO Advanced Study Institutes”

- “Geometry – von Staudt’s Point of View”, Bad Windsheim (Germania), 21.7-1.8.1980;
- “Rings and Geometry”, Istanbul, 2-14.9.1984
- “Generators and Relations in Groups and Geometries”, Castelvecchio Pascoli (LU), 1-13.4.1990

Other scientific activities

Member of the Organizing Committee of

- “Combinatorics 2002”, Maratea (PZ), 2-8.6.2002.
- “Combinatorics 2016”, Maratea (PZ), 29.5-5.6.2016.

List of papers

[33] Abreu, M.; Funk, M.; Labbate, D.; Napolitano, V.: On the Ubiquity and Utility of Cyclic Schemes.

[*Australas. J. Combin.* **55** \(2013\), 95–120.](#)

[32] Abreu, M.; Funk, M.; Labbate, D.; Napolitano, V.: Revisiting constructions of v_k configurations. In: *Recent Results in Designs and Graphs: a Tribute to Lucia Gionfriddo*, Quaderni di Matematica vol. **28**, Caserta 2012, pp. 2–20.

[31] Abreu, M.; Funk, M. J.; Labbate, D.; Napolitano, V.: Invariant adjacency matrices of configuration graphs.

[*Linear Algebra Appl.* **437** \(2012\), no. 8, 2026–2037.](#)

[30] Funk, M. J.: On a Class of Amply Regular Graphs.

[*Congr. Numer.* **202** \(2010\), 155–169.](#)

- [29] Abreu, M.; Funk, M.; Labbate, D.; Napolitano, V.: Deletions, extensions, and reductions of elliptic semiplanes.
Innovations of Incidence Geom. **11** (2010), 139-155.
- [28] Funk, M.; Labbate, D.; Napolitano, V.: Tactical (de-)compositions of symmetric configurations.
Discrete Math. **309** (2009), 741-747.
- [27] Funk, M.: Girth 5 Graphs from Elliptic Semiplanes.
Note di Matematica **29**, suppl. 1 (2009), 91-114.
- [26] Abreu, M.; Funk, M.; Labbate, D.; Napolitano, V.: Configuration Graphs of Neighbourhood Geometries.
Contributions to Discr. Math. **3** (2008), 109-122.
- [25] Abreu, M.; Funk, M.; Labbate, D.; Napolitano, V.: A (0,1)-Matrix Framework for Elliptic Semiplanes.
Ars Comb. **88** (2008), 175-191.
- [24] Funk, M.: Cyclic Difference Sets of Positive Deficiency.
Bull. Inst. Combin. Appl. **53** (2008), 47-56.
- [23] Abreu, M.; Funk, M.; Labbate, D.; Napolitano, V.: A family of regular graphs of girth 5.
Discrete. Math. **308** (2008), 1810—1815.
- [22] Abreu, M.; Funk, M.; Labbate, D.; Napolitano, V.: Configuration Graphs of Neighbourhood Geometries.
Contributions to Discr. Math. **3** (2008), 109-122.
- [21] Abreu, M.; Funk, M.; Labbate, D.; Napolitano, V.: On (Minimal) Regular Graphs of Girth 6.
Australasian J. Comb. **35** (2006), 119-132.
- [20A] Abreu, M.; Aldred, R.E.L.; Funk, M.; Jackson, B.; Labbate, D.; Sheehan, J.: Corrigendum: Graphs and Digraphs with all 2-factors isomorphic.
J. Comb. Theory B **99** (2009), 271-273.
- [20] Abreu, M.; Aldred, R.E.L.; Funk, M.; Jackson, B.; Labbate, D.; Sheehan, J.: Graphs and Digraphs with all 2-factors isomorphic.
J. Comb. Theory B **92** (2004), 395-404.
- [19] Aldred, R.E.L.; Funk, M.; Jackson, B.; Labbate, D.; Sheehan, J.: Regular bipartite graphs with all 2-factors isomorphic.
Journal of Comb. Theory B **92** (2004), 151-161
- [18] Funk, M.; Jackson, B.; Labbate, D.; Sheehan, J.: Det-Extremal Cubic Bipartite Graphs.
J. Graph Theory **44** (2003), 50—64.
- [17] Funk, M.; Jackson, B.; Labbate, D.; Sheehan, J.: 2-Factor hamiltonian graphs.
J. Comb. Theory B **87** (2003), 138—144.
- [16] Cossidente, A.; Funk, M.; Labbate, D.: Graphs arising from mixed partitions of $PG(5,q)$.

Bull. Inst. Combin. Appl. **33** (2001), 57—67.

[15] Funk, M.; Labbate, D.: On minimally one-factorable r -regular bipartite graphs. *Discrete Math.* **216** (2000), no. 1-3, 121—137.

[14] Funk, M.; Strambach, K.: Free constructions.
In: *Handbook of incidence geometry*, 739—780, North-Holland, Amsterdam, 1995.

[13] Funk, M.: On configurations of type n_κ with constant degree of irreducibility.
J. Combin. Theory Ser. A **65** (1994), no. 2, 173—201.

[12] Funk, M.; Nagy, P. T.: On collineation groups generated by Bol reflections.
J. Geom. **48** (1993), no. 1-2, 63—78.

[11] Funk, M.; Strambach, K.: On free constructions.
Manuscripta Math. **72** (1991), no. 4, 335—374.

[10] Funk, M.: On the existence of little Desargues configurations in planes satisfying certain weak configurational conditions.
Geom. Dedicata **31** (1989), no. 2, 207—235.

[9] Funk, M.: Octagonality conditions in projective and affine planes.
Geom. Dedicata **28** (1988), no. 1, 53—75.

[8] Funk, M.: On configurations in translation planes of positive characteristic.
Abh. Math. Sem. Univ. Hamburg **56** (1986), 119—125.

[7] Funk, M.; Kegel, O. H.; Strambach, K.: Gruppenuniversalität und Homogenisierbarkeit.
Ann. Mat. Pura Appl. (4) **141** (1985), 1—126.

[6] Funk, M.: On affine planes with 3-regular group of projectivities.
Geom. Dedicata **18** (1985), no. 3, 293—324.

[5] Funk, M.; Kegel, O. H.; Strambach, K. On group universality and homogeneity. In: *Universal algebra and its links with logic, algebra, combinatorics and computer science* (Darmstadt, 1983), 173—182, Res. Exp. Math., 4, Heldermann, Berlin, 1984.

[4] Funk, M.: Vier-reguläre Möbius-Ebenen.
Arch. Math. (Basel) **40** (1983), no. 1, 86—96.

[3] Funk, M.: Der Satz von v. Staudt-Schleiermacher in Minkowski-Ebenen.
Monatsh. Math. **93** (1982), no. 1, 1—14.

[2] Funk, M.: Regularität in freien Benz-Ebenen.
Geom. Dedicata **12** (1982), no. 3, 249—265.

[1] Funk, M.: Der Satz von v. Staudt-Schleiermacher in 3-Netzen.
Arch. Math. (Basel) **37** (1981), no. 1, 85—89.

[0] Funk, M.: Regularität in Benz-Ebenen.
Doktorarbeit (PhD Thesis), Erlangen 1980.