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Full Professor of Mathematics at Università di Milano-Bicocca.

Born: July 8, 1953, Milano, Italy

Fields of interest:

Fourier Analysis,
Abstract Harmonic Analysis,
Geometric Discrepancy,
Radon Transforms,
Mathematics Education.

Recent courses at Milano-Bicocca:

Calculus I (Undergraduate),
Calculus II (Undergraduate),
Harmonic Analysis (Ph.D.),
Elementary Mathematics (Graduate),
Introduction to the study of Mathematics (for high school students).

Conferences organized:

Varenna (2016), Workshop in Discrepancy Theory,
Varenna (2007), Workshop on Discrepancy Theory and Related Areas,
Milano (2001), Workshop on Fourier Analysis and Convexity,
Como (2000), Convegno nazionale di Analisi Armonica,
Torino (1993), Convegno nazionale di Analisi Armonica.

Publications

books

1. M. Bramanti, G. Travaglini, “Studying Mathematics: The Beauty, the Toil and the Method”, Springer (2018).
2. G. Travaglini, “Number theory, Fourier analysis and Geometric discrepancy”, Cambridge University Press (2014).
3. W. Chen, A. Srivastav, G. Travaglini (Editors), “Panorama of Discrepancy Theory”, Springer (2014).
4. G. Travaglini, “Appunti su Teoria dei numeri, Analisi di Fourier e Distribuzione di punti”, Unione Matematica Italiana - Pitagora (2010).
5. M. Bramanti, G. Travaglini, “Matematica. Questione di metodo”, Zanichelli (2009).
6. L. Brandolini, L. Colzani, A. Iosevich, G. Travaglini (Editors), “Fourier Analysis and convexity”, Applied and Numerical Harmonic Analysis, Birkhäuser (2004).
7. M. Andreini, G. Travaglini, “Un’introduzione allo studio della Matematica nell’Università”, CUSL (1985).
8. M. Mauri, G. Travaglini, “Analisi Matematica I, Temi d’ esame svolti”, CUSL (1985).

papers

1. L. Brandolini, L. Colzani, S. Robins, G. Travaglini, *An Euler-Maclaurin formula for polygonal sums*, preprint.
2. L. Brandolini, L. Colzani, S. Robins, G. Travaglini, *Convergence of multiple Fourier series and Pick’s theorem*, Amer. Math. Monthly 5128 (2021), 41-49.
3. L. Brandolini, G. Travaglini, *Fourier analytic techniques for lattice point discrepancy*, in “Discrepancy Theory” (D. Bilyk, J. Dick, F. Pillichshammer Editors), De Gruyter (2020), 173-216.
4. L. Brandolini, L. Colzani, B. Gariboldi, G. Gigante, G. Travaglini, *Discrepancy for convex bodies with isolated flat points*, Rev. Mat. Iberoam. **36** (2020), 1597–1626.
5. G. Travaglini, *Il paradosso di Simpson*, Emmeciquadro **71** (2019).
6. L. Brandolini, W. Chen, L. Colzani, G. Gigante, G. Travaglini, *Discrepancy and numerical integration in generalized Sobolev spaces on metric measure spaces*, J. Geom. Anal. **29** (2019), 328–369.
7. L. Brandolini, L. Colzani, G. Gigante, G. Travaglini, *Low-Discrepancy Sequences for Piecewise Smooth Functions on the Torus*, in “Contemporary Computational Mathematics - A Celebration of the 80th Birthday of Ian Sloan” (J. Dick, F. Kuo, H. Wozniakowski Editors), Springer (2018), 135-152.
8. L. Brandolini, L. Colzani, G. Gigante, G. Travaglini, *Low-discrepancy sequences for piecewise smooth functions on the two-dimensional torus*, J. Complexity, **33** (2016), 1–13.
9. G. Travaglini, M.R. Tupputi, *A characterization theorem for the L^2 -discrepancy of integer points in dilated polygons*, J. Fourier Anal. Appl., **22** (2016), 675–693.
10. L. Brandolini, L. Colzani, G. Gigante, G. Travaglini, *L^p and Weak- L^p estimates for the number of integer points in translated domains*, Math. Proc. Cambridge Philos. Soc., **159** (2015), 471-480.
11. L. Brandolini, C. Choirat, L. Colzani, G. Gigante, R. Seri, G. Travaglini, *Quadrature rules and distribution of points on manifolds*, Ann. Sc. Norm. Super. Pisa Cl. Sci. **XIII**, (2014), 889-923.

12. L. Brandolini, G. Gigante, G. Travaglini, *Irregularities of distribution and average decay of Fourier transforms*, in “Panorama of Discrepancy Theory” (W. Chen, A. Srivastav, G. Travaglini Editors), Springer (2014), 159-220.
13. L. Brandolini, L. Colzani, G. Gigante, G. Travaglini, *A Koksma-Hlawka inequality for simplices*, in “Trends in Harmonic Analysis”, Springer (2013), 33-46.
14. L. Brandolini, L. Colzani, G. Gigante, G. Travaglini, *On the Koksma-Hlawka inequality*, J. Complexity **29** (2013), 158-172.
15. L. Brandolini, G. Travaglini, *La legge di Benford*, Emmeciquadro **45** (2012).
16. W. Chen, G. Travaglini, *An L^1 estimate for the half-space discrepancy*, Acta Arith. **146** (2011), 203-214.
17. L. Colzani, G. Gigante, G. Travaglini, *Trigonometric approximation and a general form of the Erdős-Turan inequality*, Trans. Amer. Math. Soc. **363** (2011), 1101-1123.
18. L. Brandolini, G. Gigante, S. Thangavelu, G. Travaglini, *Convolution operators defined by singular measures on the motion group*, Indiana Univ. Math. J., **59** (2010), 1935-1945.
19. L. Brandolini, W. Chen, G. Gigante, G. Travaglini, *Discrepancy for randomized Riemann sums*, Proc. Amer. Math. Soc. **137** (2009), 3177-3185.
20. W. Chen, G. Travaglini, *Deterministic and probabilistic discrepancies*, Ark. Mat. **47** (2009), 273-293.
21. W. Chen, G. Travaglini, *Some of Roth's ideas in Discrepancy Theory*, in “Analytic Number Theory - Essays in Honour of Klaus Roth”, Cambridge Univ. Press (2009), 150-163.
22. W. Chen, G. Travaglini, *Discrepancy with respect to convex polygons*, J. Complexity **23** (2007), 662-672.
23. L. Brandolini, G. Gigante, A. Greenleaf, A. Iosevich, A. Seeger, G. Travaglini, *Average decay estimates for Fourier transforms of measures supported on curves*, J. Geom. Analysis **17** (2007), 15-40.
24. L. Brandolini, A. Greenleaf, G. Travaglini, *$L^p - L^{p'}$ estimates for overdetermined Radon transforms*, Trans. Amer. Math. Soc. **359** (2007), 2559-2575.
25. M. Paganoni, G. Travaglini, *Percorso di Matematica e Fisica*, Emmeciquadro - Scienza Educazione e Didattica **27** (2006), 147-149.
26. L. Colzani, I. Rocco, G. Travaglini, *Quadratic estimates for the number of integer points in convex bodies*, Rend. Circ. Mat. Palermo **LIV** (2005), 241-252.
27. G. Travaglini, *Crittografia*, Emmeciquadro - Scienza Educazione e Didattica **21** (2004), 21-28.
28. G. Travaglini, *Average decay of the Fourier transform*, in “Fourier Analysis and Convexity” (L. Brandolini, L. Colzani, A. Iosevich, G. Travaglini Editors), Birkhäuser (2004), 245-268.
29. A. Russo, G. Travaglini, *Il mestiere del Matematico*, Emmeciquadro - Scienza Educazione e Didattica **18** (2003), 142-145.
30. L. Brandolini, A. Iosevich, G. Travaglini, *Planar convex bodies, Fourier transform, lattice points, and irregularities of distribution*, Trans. Amer. Math. Soc. **355** (2003), 3513-3535.
31. L. Brandolini, L. Colzani, A. Iosevich, G. Travaglini, *The rate of convergence of Fourier expansions in the plane: a geometric viewpoint*, Math. Z. **242** (2002), 709-724.
32. L. Brandolini, L. Colzani, A. Iosevich, A. Podkorytov, G. Travaglini, *Geometry of the Gauss map and lattice points in convex domains*, Mathematika. **48** (2001), 107-117.
33. L. Brandolini, A. Iosevich, G. Travaglini, *Spherical means and the restriction phenomenon*, J. Fourier Anal. Appl. **7** (2001), 359-372.

34. F. Ricci, G. Travaglini, *Convex curves, Radon transforms and convolution operators defined by singular measures*, Proc. Amer. Math. Soc. **129** (2001), 1739-1744.
35. L. Brandolini, M. Rigoli, G. Travaglini, *Average decay of Fourier transforms and geometry of convex sets*, Rev. Mat. Iberoamer. **14** (1998), 519-560.
36. L. Brandolini, L. Colzani, G. Travaglini, *Average decay of Fourier transforms and integer points in polyhedra*, Ark. Mat. **35** (1997), 253-275.
37. L. Brandolini, G. Travaglini, *Pointwise convergence of Fejer type means*, Tohoku Math. J. **49** (1997), 323-336.
38. G. Travaglini, *Trasformate di Radon e operatori di convoluzione su gruppi e algebre di Lie*, Rend. Sem. Mat. Fis. Milano **LXV** (1995), 265-275.
39. A. Branda, P. Suria, G. Travaglini, *Un'indagine sulle capacità matematiche degli studenti dei licei scientifici*, Ins. Mat. Scienze Integr. **18B** (1995), 311-326.
40. F. Ricci, G. Travaglini, *$L^p - L^q$ estimates for orbital measures and Radon transforms on compact Lie groups and Lie algebras*, J. Funct. Anal. **129** (1995), 132-147.
41. G. Travaglini, *Fejer kernels for Fourier series on \mathbb{T}^n and on compact Lie groups*, Math. Z. **216** (1994), 265-281.
42. L. Colzani, G. Travaglini, M. Vignati, *Bochner-Riesz means of functions in weak- L^p* , Mh. Math. **115** (1993), 35-45.
43. Colzani, A. Crespi, G. Travaglini, M. Vignati, *Equiconvergence Theorems for Fourier-Bessel Expansions*, Trans. Amer. Math. Soc. **338** (1993) 43-55.
44. F. Cazzaniga, G. Travaglini, *On pointwise convergence and localization for Fourier series on compact Lie groups*, Arch. Math. **160** (1993) 378-382.
45. G. Travaglini, *Polyhedral summability of multiple Fourier series*, Coll. Math. **LXV** (1993), 103-116.
46. G. Travaglini, *Representations of Jordan algebras and special functions*, Coll. Math. **LXII** (1991), 257-266.
47. L. Colzani, G. Travaglini, *Estimates of Riesz kernels for eigenfunctions expansions of elliptic differential operators on compact manifolds*, J. Funct. Anal. **196** (1991), 1-30.
48. L. Colzani, S. Giulini, G. Travaglini, M. Vignati, *Pointwise convergence of Fourier series on compact Lie groups*, Coll. Math. **LX/LXI** (1990), 379-386.
49. G. Travaglini, *A simple proof of the divergence of Fourier series on compact connected semisimple Lie groups*, Rend. Circ. Mat. Palermo **XXXIX** (1990), 267-270.
50. G. Travaglini, *On central multipliers for compact Lie groups*, Arch. Math. **155** (1990), 394-399.
51. L. Colzani, G. Travaglini, *Hardy-Lorentz spaces and expansions in eigenfunctions of the Laplace-Beltrami operator on compact manifolds*, Coll. Math. **LVIII** (1990), 305-315.
52. L. Colzani, S. Giulini, G. Travaglini, *Sharp results for the mean summability of Fourier series on compact Lie groups*, Math. Ann. **285** (1989), 75-84.
53. S. Giulini, G. Travaglini, *Central Fourier analysis for Lorentz spaces on compact Lie groups*, Mh. Math. **107** (1989), 207-215.
54. J. Faraut, G. Travaglini, *Bessel functions associated to a representation of formally real Jordan algebras*, J. Funct. Anal. **171** (1987), 123-141.
55. G. Travaglini, *Rearrangement of coefficients of Fourier series on $SU(2)$* , Coll. Math. **LI** (1987), 373-377.

56. S. Giulini, G. Travaglini, *Sharp estimates for Lebesgue constants on compact Lie groups*, J. Funct. Anal. **168** (1986), 106-116.
57. J.F. Price, G. Travaglini, *Weighted norm inequalities for Fourier partial sums*, Math. Japon. **130** (1985), 327-340.
58. M. Rigoli, G. Travaglini, *A remark on mappings of bounded symmetric domains into balls*, in "Harmonic analysis (Cortona, 1982)" (G. Mauceri, F. Ricci, G. Weiss Editors) Springer (1983), 387-390.
59. G. Travaglini, *An analogue of the Schwarz lemma for bounded symmetric domains*, Proc. Amer. Math. Soc. **188** (1983), 85-88
60. G. Travaglini, *The translation invariant uniform approximation property for compact groups*, Proc. Amer. Math. Soc. **186** (1982), 410-412.
61. G. Travaglini, *Weyl functions and A_p condition on compact Lie groups*, J. Austr. Math. Soc. 1, **33** (1982), 185-192.
62. S. Giulini, P.M. Soardi, G. Travaglini, *Norms of characters and Fourier series on compact Lie groups*, J. Funct. Anal. **146** (1982), 88-101
63. S. Giulini, P.M. Soardi, G. Travaglini, *Norms of characters and convergence of Fourier series on compact Lie groups*, Suppl. Rend. Circ. Mat. Palermo **11** (1981), 171-173.
64. P. Soardi, G. Travaglini, *On sets of completely uniform convergence*, Coll. Math. **XLV** (1981), 317-320.
65. S. Giulini, G. Travaglini, *L^p estimates for matrix coefficients of irreducible representations of compact groups*, Proc. Amer. Math. Soc. **180** (1980), 448-450.
66. G. Travaglini, *Dirichlet kernels and failure of localization principle for compact groups*, Rend. Ist. Lomb. Cl. Sc. 1(A) **113** (1979), 111-116.
67. S. Giulini e P.M. Soardi, G. Travaglini, *A Cohen type inequality for compact Lie groups*, Proc. Amer. Math. Soc. **177** (1979), 359-364.
68. G. Travaglini, *Some properties of UC-sets*, Boll. Un. Mat. Ital. **15-B** (1978), 272-284.