

Current position and institution:
Associate Professor,
Dipartimento di Matematica "F. Enriques",
Università degli Studi di Milano,
Via C. Saldini, 50, I-20133 Milano

Academic degree and positions:
Laurea in Matematica, obtained in June 1977 from Università degli Studi di Milano;
1977--1981 C.N.R. fellowship for researches in Algebra and Geometry;
1981--1987 ricercatore confermato, Facoltà di Scienze Matematiche Fisiche e Naturali,
Università degli Studi di Milano;
1987—now professore associato di Geometria

Main field of interest:
Complex projective Algebraic Geometry: subvarieties of Grassmannians, special varieties, automorphisms, classification.
Application of Algebraic Geometry to Computer Vision

Other fields of interest:
Complex Analysis and Algebraic Topology: Hyperfunction theory, duality theorems.

Other activities:
Popularization of Mathematics: organization of exhibitions (*matemilano*), editor with P.Bellingeri et al. of the book "Il ritmo delle forme" (Mimesis, 2000) (French version), editor with M. Bertolini et al. of the book " *matemilano - percorsi matematici in città*" (Springer Italia, 2004), editor with M.Bertolini et al. of the book "Con altri occhi" (Electa, 2005) .
Member of *matematita*

List of Papers:

[1] Turrini, Cristina – Gli automorfismi delle rigate geometriche razionali. *Istit. Lombardo Accad. Sci. Lett. Rend.* **A 113** (1979), 210--223.

[2] Turrini, Cristina – Parametrizzazione degli spazi lineari di una ipersuperficie quadrica. *Istit. Lombardo Accad. Sci. Lett. Rend.* **A 113** (1979), 366--372.

[3] Lanteri, Antonio; Turrini, Cristina – Alcune proprietà delle varietà fibrate in spazi lineari. *Rend. Semin. Mat. Brescia.* **5** (1980), 115--135.

[4] Turrini, Cristina – Rivestimenti doppi di superfici algebriche. *Ist. Mat. F. Enriques, Milano, Quaderno 58/S*, 1980.

- [5] Turrini, Cristina – Su una generazione proiettiva di scrolls ellittici mediante plurisecanti. *Istit. Lombardo Accad. Sci. Lett. Rend. A* **114** (1980), 288--299.
- [6] Lanteri, Antonio; Turrini, Cristina - On the automorphisms of the elliptic ruled surfaces. *Boll. Un. Mat. Ital. D* (6) **1** (1982), no. 1, 41--58.
- [7] Lanteri, Antonio; Turrini, Cristina - Some formulas concerning nonsingular algebraic varieties embedded in some ambient variety. *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur.* **116** (1982), no. 3-6, 463--474.
- [8] Turrini, Cristina - Remarks on the normal bundles of the normal rational scrolls. *Istit. Lombardo Accad. Sci. Lett. Rend. A* **118** (1984), 99--110.
- [9] Struppa, Daniele; Turrini, Cristina – Relative sheaf cohomology and a holomorphic Alexander-Pontrjagin duality theorem. Dipart. di Mat. F. Enriques, Milano, Quaderno 9/S, 1983.
- [10] Rosolini, Giuseppe; Struppa, Daniele; Turrini, Cristina - Local and global problems: the sheaf approach. *Nepali Math. Sci. Rep.* **9** (1984), no. 1, 1--27.
- [11] Struppa, Daniele; Turrini, Cristina - A duality theorem for complex manifolds. *Math. Z.* **188** (1985), no. 2, 189--201.
- [12] Struppa, Daniele C.; Turrini, Cristina - Hyperfunctions and boundary values of holomorphic functions. *Nieuw Arch. Wisk.* (4) **4** (1986), no. 2, 91--118.
- [13] Struppa, Daniele; Turrini, Cristina - A remark on Alexander duality and Thom classes. *Rend. Istit. Mat. Univ. Trieste* **17** (1985), no. 1-2, 79--86.
- [14] Lanteri, Antonio; Turrini, Cristina – Projective threefolds of small class. *Abh. Math. Sem. Univ. Hamburg*, **57** (1987), 103-117.
- [15] Struppa, Daniele; Turrini, Cristina - Sheaf cohomology of the complements of complex submanifolds. *Boll. Un. Mat. Ital. A* (7) **2** (1988), no. 2, 231--239. Erratum in *Boll. Un. Mat. Ital. A* (7) **3** (1989), no. 1, 133.
- [16] Bertolini, Marina; Turrini, Cristina - On the automorphisms of some line congruences in P^3 . *Geom. Dedicata* **27** (1988), no. 2, 191--197.
- [17] Bertolini, Marina; Turrini, Cristina - On Lefschetz duality in de Rham cohomology. Report 1988.
- [18] Turrini, Cristina - On the classes of a projective manifold. *Seminars in Complex Analysis and Geometry*, 1988, 131--154, *Sem. Conf.*, **4**, EditEl, Rende, 1990.
- [19] Struppa, Daniele C.; Turrini, Cristina - Pincherle's contribution to the Italian school of analytic functionals. *Conference on the History of Mathematics* (Cetraro, 1988), 551--560, *Sem. Conf.*, **7**, EditEl, Rende, 1991.
- [20] Frigerio, Emma; Turrini, Cristina - On order-two line congruences in P^n . *Arch. Math.* **55** (1990), no. 4, 412--416.

- [21] Frigerio, Emma; Turrini, Cristina - On some line congruences in P^4 . *Le Matematiche (Catania)* **46** (1991), no. 2, 645--653.
- [22] Turrini, Cristina; Verderio, Enrico – Projective surfaces of small class. *Geom. Dedicata* **47** (1993), no. 1, 1--14.
- [23] Lombardini, Marina; Turrini, Cristina - A remark on the class of a projected manifold. *Writings in honor of Giovanni Melzi*, 249--254, *Sci. Mat.*, **11**, Vita e Pensiero, 1994.
- [24] Arrondo, Enrique; Bertolini, Marina; Turrini, Cristina – Classification of smooth congruences with a fundamental curve. *Projective geometry with applications*, 43—56, *Lecture Notes in Pure and Appl. Math.* **166**, Dekker, New York, 1994.
- [25] Lanteri, Antonio; Turrini, Cristina - Projective surfaces with class less than or equal to twice the degree. *Math. Nachr.* **175** (1995), 199--207.
- [26] Ballico, Edoardo; Bertolini, Marina; Turrini, Cristina Projective varieties with degenerate dual variety in char p . *Rend. Sem. Mat. Univ. Politec. Torino* **53** (1995), no. 1, 13--18.
- [27] Ballico, Edoardo; Bertolini, Marina; Turrini, Cristina On the class of some projective varieties. *Collect. Math.* **48** (1997), no. 3, 281--287.
- [28] Bertolini, Marina; Turrini, Cristina - Surfaces in P^4 with no quadrisecant lines. *Beiträge Algebra Geom.* **39** (1998), no. 1, 31--36.
- [29] Palleschi, Marino; Turrini, Cristina - On polarized surfaces with a small generalized class. *Extracta Math.* **13** (1998), no. 3, 371--381.
- [30] Lanteri, Antonio; Turrini, Cristina - Elliptic surfaces with a nef line bundle of genus two. *Dedicated to the memory of Fernando Serrano. Collect. Math.* **49** (1998), no. 2-3, 361--381.
- [31] Arrondo, Enrique; Bertolini, Marina; Turrini, Cristina - Congruences of small degree in $G(1,4)$. *Comm. Algebra* **26** (1998), no. 10, 3249--3266.
- [32] Arrondo, Enrique; Bertolini, Marina; Turrini, Cristina - Quadric bundle congruences in $G(1,n)$. *Forum Math.* **12** (2000), no. 6, 649--666.
- [33] Arrondo, Enrique; Bertolini, Marina; Turrini, Cristina – A focus on focal surfaces. *Asian J. Math.* **5** (2001), no. 3, 535--560.
- [34] Arrondo, Enrique; Bertolini, Marina; Turrini, Cristina – Focal loci in $G(1,N)$, *Asian J. Math.* **9** (2005), no. 4, 449--472.
- [35] Bertolini, Marina; Turrini, Cristina – Critical configurations for 1-view in projections from P^k to P^2 - *J. Math. Imaging and Vision*, **27** (2007), 277--287.
- [36] Besana, GianMario; Bertolini, Marina; Turrini, Cristina – Instability of projective reconstruction from 1-view near critical configurations in higher dimensions - *Contemporary Mathematics* (2007), **448**, 1--12.

- [37] Besana, GianMario; Bertolini, Marina; Turrini, Cristina – Instability of projective reconstruction of dynamic scenes near critical configurations - *Proc. ICCV 2007*- IEEE 11th International Conference on Computer Vision, pp.1-7, 14-21 Oct. 2007
- [38] Besana, GianMario; Bertolini, Marina; Turrini, Cristina – Reconstruction of Some Segmented and Dynamic Scenes: Trifocal Tensors in P^4 : Theoretical Set Up for Critical Loci, and Instability *Advances in Visual Computing* - 4th International Symposium, ISVC 2008, Las Vegas, NV, USA, December 1-3, 2008. Proceedings, Part II . Series: Lecture Notes in Computer Science Springer Berlin / Heidelberg, **5359** (2008) p. 1125-1136
- [39] Besana, GianMario; Bertolini, Marina; Turrini, Cristina - Applications of Multiview Tensors in Higher Dimensions. *Tensors in Image Processing and Computer Vision. Series: Advances in Pattern Recognition* Aja-Fernández, S.; de Luis García, R.; Tao, D.; Li, X. (Eds.) Springer Berlin / Heidelberg (2009)- p.237-260
- [40] Alzati, Alberto; Bertolini, Marina; Borghese, N. Alberto; Turrini, Cristina - Tracking 3D Orientation through Corresponding Conics - *Proc. ACIVS 2009* - LNCS 5807- p.456-461
- [41] Arrondo, Enrique; Bertolini, Marina; Turrini, Cristina – On the ampleness of the normal bundle of line congruences - *Forum Math.* - 2010
- [42] Besana, GianMario; Bertolini, Marina; Turrini, Cristina – Projective reconstruction of some dynamic scenes from two videos - *preprint* (2011)
- [43] Alzati, Alberto; Bertolini, Marina; Borghese, N. Alberto; Frosio, Iuri; Turrini, Cristina – Linear Pose Estimate from Corresponding Conics – *Pattern Recognition (2012)* - 45- p.4169-4181
- [44] Alzati, Alberto; Frosio, Iuri; Turrini, Cristina – Conic Based Camera Re-calibration after zooming - *Proc. ICIAP 2013*, Springer L. N. in Computer Science, 8156 (2013) pp. 361-370
- [45] Alzati, Alberto; Frosio, Iuri; Turrini, Cristina – Camera Re-calibration after zooming on sets of conics – sottoposto a rivista
- [46] Bertolini, Marina; Turrini, Cristina - Threefolds in P^6 of degree 12 (in corso di stampa in *Advances in Geometry*)
- [47] Besana, GianMario; Bertolini, Marina; Turrini, Cristina - Critical loci for projective reconstruction from multiple views in higher dimension: a comprehensive theoretical approach (in corso di stampa in *Linear Algebra and its applications*).

Books and papers on popularization of mathematics

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Matemilano : percorsi matematici in citta' / [a cura di] Bertolini, Marina; Cazzola, Marina; Dedo', Maria; Di Sieno, Simonetta; Frigerio, Emma; Luminati, Domenico; Poldi, Gianluca; Rampichini, Marta; Tamanini, Italo; Todesco, Gian Marco; Turrini, Cristina. - Milano : Springer Verlag, 2004

Bertolini, Marina; Dedo', Maria; Di Sieno, Simonetta; Turrini, Cristina - Con quali occhi? Per guardare che cosa? - In: Con altri occhi: sguardi matematici e non sulla citta' / M. Bertolini, M. Dedo', S. Di Sieno, C. Turrini. - Milano : Electa, 2005

Di Sieno, Simonetta; Turrini, Cristina - Mathematics in ...: A Format for Mathematics Exhibits / - In: Mathematics and Culture V / [a cura di] Michele Emmer. - Berlin : Springer Verlag, 2007. - pp. 153-166