

Domenico FIORENZA

Curriculum Vitae ai fini della pubblicazione

Part I – Education

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	1996	Università di Roma La Sapienza	Mathematics; Thesis “La riduzione delle varietà algebriche”; advisor: Riccardo Salvati Manni; 110/110 e lode (full marks and honours); Thesis defense: 16 July 1996.
Post-graduate studies	1996-2002	Università di Pisa	Mathematics
PhD	2002	Università di Pisa	Mathematics; PhD Thesis “Feynman diagrams, moduli spaces and the KdV hierarchy”; advisor: Enrico Arbarello; Thesis defense: 11 December 2002

Part II – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
2001	2002	Università di Roma Tor Vergata	Assegno di Ricerca (PostDoc)
2003	2004	Università di Roma La Sapienza	Assegno di Ricerca (PostDoc)
2005	2015	Università di Roma La Sapienza	Ricercatore
2015	present	Università di Roma La Sapienza	Professore Associato

IIIB – Other Appointments

Start	End	Institution	Position
01/02/2005	28/02/2005	IHES	Visiting professor
07/04/2013	16/04/2013	MPIM Bonn	Visiting professor
24/01/2016	29/01/2016	MPIM Bonn	Visiting professor
10/11/2019	15/11/2019	MPIM Bonn	Visiting professor

Part III – Teaching experience

Year	Institution	Lecture/Course
2023	Sapienza - Università di Roma	Istituzioni di Matematica, I (C. di L. in Architettura C.U.)
2023	Sapienza - Università di Roma	Istituzioni di Algebra e Geometria (C. di L. in Matematica per le Applicazioni)
2022	Sapienza - Università di Roma	Istituzioni di Matematica, I (C. di L. in Architettura C.U.)
2022	Sapienza - Università di Roma	Topologia Algebrica (C. di L. in Matematica)
2021	Sapienza - Università di Roma	Istituzioni di Matematica, I (C. di L. in Architettura C.U.)
2021	Sapienza - Università di Roma	Topologia Algebrica (C. di L. in Matematica)
2020	Sapienza - Università di Roma	Istituzioni di Matematica, I (C. di L. in Architettura C.U.)
2020	Sapienza - Università di Roma	Topologia Algebrica (C. di L. in Matematica)
2019	Sapienza - Università di Roma	Geometria Algebrica (C. di L. in Matematica)
2019	Sapienza - Università di Roma	Istituzioni di Algebra Superiore (C. di L. in Matematica)
2018	Sapienza - Università di Roma	Lo spazio e le misure: teoria, didattica e applicazioni (C. di L. in Scienze della formazione primaria)
2018	Sapienza - Università di Roma	Algebra lineare (C. di L. in Matematica)
2018	Sapienza - Università di Roma	Geometria superiore (C. di L. in Matematica)
2017	Sapienza - Università di Roma	Lo spazio e le misure: teoria, didattica e applicazioni (C. di L. in Scienze della formazione primaria)
2017	Sapienza - Università di Roma	Algebra I (C. di L. in Matematica)
2016	Sapienza - Università di Roma	Topologia algebrica (C. di L. in Matematica)
2016	Sapienza - Università di Roma	Geometria I (C. di L. in Matematica)
2015	Sapienza - Università di Roma	Variabile complessa (C. di L. in Matematica)
2015	Sapienza - Università di Roma	Istituzioni di geometria superiore (C. di L. in Matematica)
2014	Sapienza - Università di Roma	Geometria (C. di L. in Fisica)
2013	Sapienza - Università di Roma	Variabile complessa (C. di L. in Matematica)
2012	Sapienza - Università di Roma	Istituzioni di geometria superiore (C. di L. in Matematica)
2011	Sapienza - Università di Roma	Geometria 1 (C. di L. in Matematica)
2010	Sapienza - Università di Roma	Di cosa parliamo quando parliamo di stringhe (Dottorato in Matematica)
2010	Sapienza - Università di Roma	Algebra lineare (C. di L. in Matematica)
2009	Sapienza - Università di Roma	Geometria (C. di L. in Fisica)
2008	Sapienza - Università di Roma	Matematica (C. d. L. in Scienze applicate ai beni culturali)
2007	Sapienza - Università di Roma	Topologia (C. d. L. in Matematica)

2006	Sapienza - Università di Roma	Geometria 2 (C. d. L. in Fisica)
2005	Sapienza - Università di Roma	Calcolo e Biostatistica (C. d. L. in Biologia)
2003	Sapienza - Università di Roma	Omotopia razionale delle varietà (Dottorato in Matematica, corso cotenuto con Enrico Arbarello)

I have moreover acted as advisor for 25 tesi di laurea specialistica/magistrale (Master's Thesis) and 42 tesi di laurea (Bachelor's Thesis).

Part IV - Society memberships, Awards and Honors

Year	Title
2014	Riconoscimento di eccellente insegnamento universitario per l'a.a. 2012-13
2017	Riconoscimento di eccellente insegnamento universitario per l'a.a. 2015-16
2018	Riconoscimento di eccellente insegnamento universitario per l'a.a. 2016-17
2020	Riconoscimento di eccellente insegnamento universitario per l'a.a. 2019-20

Part V - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value
2019	Spazi di moduli: aspetti infinitesimali, locali e globali (protocollo RM11916B6AF58233)	Progetti di Ricerca di Ateneo - Progetti Medi - PI	14.900
2017	(Finanziamento delle Attività Base di Ricerca - it is a reward funding, rewarding quality of research on the basis of national evaluation results and not related to a research project)	FFABR - PI	3.000
2016	Spazi di moduli - Aspetti infinitesimali, locali e globali (protocollo RM116154CCF40A5E)	Progetti di Ricerca di Ateneo - Progetti Medi - PI	8.000
2014	Spazi di moduli, teoria delle deformazioni e superfici K3 (progetto C26A14X48F)	Ricerca Universitaria - PI	8.000
2022	Moduli spaces and special varieties (protocollo 20228JRCYB_001)	PRIN - I	???
2018	Algebraic and differential aspects of real and complex manifolds	Progetti di Ricerca di Ateneo - Progetti Grandi - I	31.000
2017	Moduli and Lie Theory (protocollo 2017YRA3LK_001)	PRIN - I	217.234

2017	Varieta' speciali, spazi di moduli e teoria delle deformazioni.	Progetti di Ricerca di Ateneo - Progetti Medi - I	10.889
2015	Moduli spaces and Lie theory (protocollo 2015ZWST2C_001)	PRIN - I	158.134
2015	Moduli, deformazioni e superfici K3 (progettoC26A15MZY3)	Ricerca Universitaria - I	12.000,
2013	Teoria dei moduli e delle deformazioni delle varietà algebriche e dei fasci (progetto C26A13APZ5)	Ricerca Universitaria - I	7.000
2012	Prospettive in Teoria di Lie (progetto RBFR12RA9W)	FIRB - I	459.585
2012	Spazi di Moduli e Teoria di Lie (protocollo 2012KNL88Y_001)	PRIN - I	150.894
2012	Spazi di Moduli e teoria delle deformazioni (progetto C26A125C4R)	Ricerca Universitaria - I	7.000
2011	Moduli, Lie theory and applications (progetto C26A11EC5N)	Ricerca Universitaria - I	40.000
2010	Aspetti omotopici e derivati in teoria delle deformazioni (progetto C26A10ZS32)	Ricerca Universitaria - I	5.000
2009	Teoria di Lie e generalizzazioni, Forme modulari, Topologia di spazi di moduli, Teoria dell'indice, Geometria algebrica complessa (protocollo 20097NBFW5 001)	PRIN - I	214.175
2009	Localizzazione ottimale delle funzioni di Wannier nei solidi cristallini: un approccio geometrico-variazionale (progetto C26F09MCXC)	Ricerca di Ateneo Federato - I	8.000
2009	Caratteri graduati, spazi di moduli ed invarianza modulare (progetto C26A09EFE7)	Ricerca Universitaria - I	??
2008	Spazi di moduli (progetto C26F08RTXL)	Ricerca di Ateneo Federato - I	??
2008	Spazi di moduli (progetto C26A08CN4C)	Ricerca Universitaria - I	??
2007	Spazi di moduli e Teoria di Lie (protocollo 20074S8FZR 001)	PRIN - I	95.880

2007	Geometria delle varietà (progetto C26F07M9FN)	Ricerca di Ateneo Federato - I	??
2007	Geometria delle varietà (progetto C26A07ZRTW)	Ricerca Universitaria - I	??
2006	Classificazione di varietà algebriche, differenziali e topologiche (progetto C26A06EMPJ)	Ricerca di Ateneo - I	??
2006	Classificazione di varietà algebriche, differenziali e topologiche (progetto C26F06J7PJ)	Ricerca di Facoltà - I	??
2005	Spazi di moduli e Teoria di Lie (protocollo 2005017758 001)	PRIN - I	182.000
2005	Classificazione di varietà algebriche, differenziali e topologiche (progetto C26A059045)	Ricerca di Ateneo - I	??
2005	Classificazione di varietà algebriche, differenziali e topologiche (progetto C26F050745)	Ricerca di Facoltà - I	??

Part VI – Research Activities

Keywords	Brief Description
Homotopical algebra	The investigation of algebraic structures up to homotopy, i.e., of the realm of algebra where identities only hold up to homotopies which in turn satisfy suitable coherence conditions
Infinitesimal deformation theory	The investigation of deformation problems allowing the deformation parameter to be infinitesimally small. Algebraically, this corresponds to the study of differential graded Lie algebras
Topological quantum field theories	The study of linear representation of the category of cobordism and of his higher versions (extended cobordism)
Smooth stacks	The study of sheaves and higher sheaves over the site of smooth manifolds. It turns out that many constructions in contemporary theoretical physics are best expressed using the language of smooth stacks

Part VII – Summary of Scientific Achievements

Con esclusivo riferimento alle tipologie di prodotti valide per la partecipazione alle procedure di Abilitazione Scientifica Nazionale, in relazione al Settore concorsuale per il quale è indetta la procedura e all'arco temporale delle pubblicazioni selezionabili:

Product type	Number	Data Base	Start	End
Papers [international]	35	Scopus	2014	2024
Papers [national]	0			
Books [scientific]	1			
Books [teaching]	0			

Total Impact Factor **47,943** (computed as the sum over the published papers of the impact factors of the corresponding journals in the year of publication; for papers published in 2024, the 2023 IF has been used)

Average Impact Factor **1,370** (computed as 47,943/35)

Total Citations **435**

Total Citations Excluding Self Citations of All Authors **172**

Average Citations per Product **12,093**

Average Citations per Product Excluding Self Citations of All Authors **4,914**

Hirsch (H) index **14**

Hirsch (H) index Excluding Self Citations of All Authors **8**

Normalized H index* **1,4** (computed as 14/10)

Normalized H index* Excluding Self Citations of All Authors **0,8** (computed as 8/10)

*H index divided by the time span of eligible publications.

Complessivo:

Product type	Number	Data Base	Start	End
Papers [international]	50	Scopus	2002	2024
Papers [national]	0			
Books [scientific]	1			
Books [teaching]	0			

Total Impact Factor **64,309** (computed as the sum over the published papers of the impact factors of the corresponding journals in the year of publication; for papers published in 2023, the 2022 IF has been used; for papers published before 2010, if the journal

	was not yet indexed, the IF of the first year of indexing has been used)
Average Impact Factor	1,286 (computed as 64,309/50)
Total Citations	729
Total Citations Excluding Self Citations of All Authors	377
Average Citations per Product	14,294
Average Citations per Product Excluding Self Citations of All Authors	7,392
Hirsch (H) index	18
Hirsch (H) index Excluding Self Citations of All Authors	13
Normalized H index*	0,857 (computed as 18/21)
Normalized H index* Excluding Self Citations of All Authors	0,619 (computed as 13/21)

Two most cited publications	<ul style="list-style-type: none"> • Čech cocycles for differential characteristic classes: an ∞-Lie theoretic construction. (with Jim Stasheff and Urs Schreiber) <i>Adv. Theor. Math. Phys.</i> 16 (2012), no. 1, 149–250. [77; excluding self citations of all authors: 58] • L_∞ structures on mapping cones. (with Marco Manetti) <i>Algebra Number Theory</i> 1 (2007), no. 3, 301–330. [Scopus: 52; excluding self citations of all authors: 40]
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*H index divided by the academic seniority. Il numero di anni di attività accademica è il più grande numero intero di anni contenuti nel periodo che va dalla data di conseguimento del dottorato di ricerca (11/12/2002) alla data di scadenza del Bando (28/07/2024);

Part VIII– Selected Publications

List of the publications selected for the evaluation. For each publication report title, authors, reference data, journal IF (if applicable), citations, press/media release (if any).

1. Brackets and products from centres in extension categories (with Niels Kowalzig); *Advances in Mathematics*. Volume 442, April 2024, 109544 [journal IF (2023): 1.5; Scopus: 0 (excluding self citations of all authors: 0)]
2. CR-twistor spaces over manifolds with G_2 and $Spin(7)$ -structures (with Hong Van Le); *Annali di Matematica Pura ed Applicata*, 2023, 202(4), pp. 1931–1953 [journal IF (2023): 1.0; Scopus: 0]

3. The (anti-)holomorphic sector in C/Λ -equivariant cohomology, and the Witten class (with Eugenio Landi and Mattia Coloma); *Journal of Geometry and Physics* Volume 186, April 2023, 104750 [journal IF (2022): 1.380; Scopus: 0 (0)]
4. An exposition of the topological half of the Grothendieck–Hirzebruch–Riemann–Roch theorem in the fancy language of spectra (with Eugenio Landi and Mattia Coloma); *Expositiones Mathematicae*, 2022, 40(2), pp. 357–394 [journal IF (2022): 1.339; Scopus: 0 (0)]
5. Cyclic Gerstenhaber-Schack cohomology (with Niels Kowalzig); *Journal of Noncommutative Geometry* 2022, 16(1), pp. 119–151 [journal IF (2022): 0.768; Scopus: 0 (0)]
6. Almost formality of manifolds of low dimension (with Kotaro Kawai, Hong Van Le, Lorenz Schwachhöfer), *Annali della Scuola Normale Superiore - Classe di Scienze (5)* Vol. XXII (2021), 79–107. [journal IF (2021): 1.041; Scopus: 1 (1)]
7. Formally integrable complex structures on higher dimensional knot spaces (with Hong Van Le); *Journal of Symplectic Geometry* Volume 19, Issue 3 (2021), Pages 507 – 529 [journal IF(2021): 1.185; Scopus: 1 (0)]
8. Twisted cohomotopy implies M- theory anomaly cancellation on 8-manifolds. (with Hisham Sati and Urs Schreiber) *Comm. Math. Phys.* 377 (2020), no. 3, 1961–2025 [journal IF (2020): 2.386; Scopus: 19 (4)]
9. Higher brackets on cyclic and negative cyclic (co)homology. (with Niels Kowalzig) *Int. Math. Res. Not. IMRN* 2020, no. 23, 9148–9209 [journal IF (2020): 1.600; Scopus: 6 (4)]
10. Formal Abel-Jacobi maps. (with Marco Manetti) *Int. Math. Res. Not. IMRN* 2020, no. 4, 1035–1090. [journal IF (2020): 1.600; Scopus: 4 (2)]
11. Hodge theory and deformations of affine cones of subcanonical projective varieties. (with Carmelo Di Natale and Enrico Fatighenti) *J. Lond. Math. Soc. (2)* 96 (2017), no. 3, 524–544. [journal IF (2017): 0.892; Scopus: 8 (5)]
12. \mathbb{Z}_2 invariants of topological insulators as geometric obstructions. (with Domenico Monaco and Gianluca Panati) *Comm. Math. Phys.* 343 (2016), no. 3, 1115–1157. [journal IF (2016): 2.500; Scopus: 32 (19)]
13. Construction of real-valued localized composite Wannier functions for insulators. (with Domenico Monaco and Gianluca Panati) *Ann. Henri Poincaré* 17 (2016), no. 1, 63–97. [journal IF (2016): 1.599; Scopus: 28(15)]
14. Boundary conditions for topological quantum field theories, anomalies and projective modular functors. (with Alessandro Valentino) *Comm. Math. Phys.* 338 (2015), no. 3, 1043–1074. [journal IF (2015): 2.375; Scopus: 17 (16)]

15. The E8 moduli 3-stack of the C-field in M-theory. *Comm. Math. Phys.* 333 (2015), no. 1, 117–151. (with Hisham Sati and Urs Schreiber) [journal IF (2015): 2.375; Scopus: 25 (5)]

Part IX – Other Publications and Preprints

1. Integrals detecting degree 3 string cobordism classes (with Eugenio Landi); *Bollettino dell'Unione Matematica Italiana*. Volume 17, pages 349–371, (2024) [IF (2023): 0.7; Scopus: 0 (0)]
2. The Character Map in Nonabelian Cohomology (book); (with Hisham Sati and Urs Schreiber); World Scientific (2023) [Scopus: 5 (1)]
3. A very short note on the (rational) graded Hori map (with Eugenio Landi and Mattia Coloma); *Communications in Algebra*, 2022, 50(5), pp. 2250–2263 [IF (2022): 0.617; Scopus: 0 (0)]
4. Twistorial cohomotopy implies Green-Schwarz anomaly cancellation (with Hisham Sati and Urs Schreiber); *Reviews in Mathematical Physics*, 2022, 34(5), 2250013 [IF (2022): 1.383; Scopus: 5 (1)]
5. Twisted Cohomotopy Implies Level Quantization of the Full 6d Wess-Zumino Term of the M5-Brane. (with Hisham Sati and Urs Schreiber) *Comm. Math. Phys.* 384 (2021), 403–432 [journal IF (2021): 2.361; Scopus: 11 (0)]
6. Strongly homotopy Lie algebras and deformations of calibrated submanifolds (with Hong Van Le, Lorenz Schwachhofer and Luca Vitagliano); *Asian J. Math.* 2021, 25(3), pp. 341–368 [IF (2021): 0.593; Scopus: 0 (0)]
7. Twisted cohomotopy implies twisted string structure on M5-branes (with Hisham Sati and Urs Schreiber); *Journal of Mathematical Physics*, 2021, 62(4), 042301 [IF (2021): 1.469; Scopus: 8 (1)]
8. Super-exceptional embedding construction of the heterotic M5: Emergence of SU(2)-flavor sector (with Hisham Sati and Urs Schreiber), *Journal of Geometry and Physics*, Volume 170 (2021) [IF (2021): 1.249; Scopus: 3 (1)]
9. Super-exceptional geometry: origin of heterotic M-theory and super-exceptional embedding construction of M5 (with Hisham Sati and Urs Schreiber), *JHEP* (2020) Article number: 107 (2020) [IF(2020): 5.810; Scopus: 8 (1)]
10. Higher T-duality of super M-branes (with Hisham Sati and Urs Schreiber) *Advances in Theoretical and Mathematical Physics* Volume 24 (2020) Number 3, Pages: 621 – 708 [IF(2020): 1.276; Scopus: 4 (0)]
11. The Rational Higher Structure of M-theory (with Hisham Sati and Urs Schreiber)

Proceedings of LMS/EPSRC Durham Symposium Higher Structures in M-Theory, August 2018; *Fortschritte der Physik*, May 2019 [IF (2019): 3.921; Scopus: 18 (3)]

12. Hearts and towers in stable infinity-categories (with Fosco Loregian and Giovanni Marchetti), *Journal of Homotopy and Related Structures* (2019), Volume 14, Issue 4, pp 993--1042 [IF (2019): 0.537; Scopus: 0 (0)]
13. T-duality from super Lie n -algebra cocycles for super p -branes (with Hisham Sati and Urs Schreiber), *Advances in Theoretical and Mathematical Physics*, Vol. 22, No. 5 (2018) [IF(2018): 1.667; Scopus: 21 (5)]
14. Rational sphere valued supercocycles in M-theory and type IIA string theory (with Hisham Sati and Urs Schreiber), *Journal of Geometry and Physics*, Volume 114, p. 91-108 (2017) [IF (2017): 0.712; Scopus: 28 (4)]
15. The WZW term of the M5-brane and differential cohomotopy (with Hisham Sati and Urs Schreiber), *J. Math. Phys.* 56, 102301 (2015) [IF (2015): 1.234; Scopus: 26 (4)]
16. Central extensions of mapping class groups from characteristic classes (with Urs Schreiber and Alessandro Valentino), *Cahiers de Topologie et Géométrie Différentielle Catégoriques*, volume LIX-3, 2018
17. t -structures are normal torsion theories (with Fosco Loregian), *Applied Categorical Structures* 24, pages181–208(2016) [IF (2016): 0.523; Scopus: 3 (1)]
18. Super Lie n -algebra extensions, higher WZW models, and super p -branes with tensor multiplet fields (with Hisham Sati and Urs Schreiber), *International Journal of Geometric Methods in Modern Physics* Vol. 12, No. 02, 1550018 (2015) [IF (2015): 0.769; Scopus: 42 (20)]
19. L-infinity algebras of local observables from higher prequantum bundles (with Christopher L. Rogers and Urs Schreiber), *Homology, Homotopy and Applications*, vol. 16(2), 2014, pp.107-142 [IF (2014): 0.359; Scopus: 26 (16)]
20. Higher $U(1)$ -gerbe connections in geometric prequantization (with Christopher L. Rogers and Urs Schreiber), *Rev. Math. Phys.*, Vol. 28, Issue 06, 1650012 (2016) [IF (2016): 1.426; Scopus: 14 (11)]
21. A higher stacky perspective on Chern-Simons theory (with Hisham Sati and Urs Schreiber), in *Mathematical Aspects of Quantum Field Theories* (Damien Calaque and Thomas Strobl Eds.), Springer (2015) [Scopus: 27 (11)]
22. Multiple M5-branes, String 2-connections, and 7d nonabelian Chern-Simons theory (with Hisham Sati and Urs Schreiber), *Advances in Theoretical and Mathematical Physics* Vol. 18, No. 2, 229-321 (2014) [IF(2014): 1.345; Scopus: 45 (21)]
23. Extended higher cup-product Chern-Simons theories. (with Hisham Sati and Urs Schreiber) *J. Geom. Phys.* 74 (2013), 130–163. [journal IF (2013): 0.797; Scopus: 34 (7)]
24. A higher Chern-Weil derivation of AKSZ sigma-models (with Chris Rogers and Urs Schreiber), *International Journal of Geometric Methods in Modern Physics*, Vol. 10, No. 1

- (2013) 1250078 (36 pages) [IF (2013): 0.617; Scopus: 24 (20)]
25. Differential graded Lie algebras controlling infinitesimal deformations of coherent sheaves (with Donatella Iacono and Elena Martinengo), *Journal of the European Mathematical Society*, Volume 14, Issue 2, 2012, pp. 521-540 [journal IF (2012): 1.880; Scopus: 17 (14)]
 26. Formality of Koszul brackets and deformations of holomorphic Poisson manifolds. (with Marco Manetti) *Homology Homotopy Appl.* 14 (2012), no. 2, 63–75. [journal IF (2012): 0.433; Scopus: 26 (19)]
 27. Cosimplicial DGLAs in deformation theory (with Marco Manetti and Elena Martinengo), *Communications in Algebra* Volume 40, Issue 6 (2012) 2243-2260 [IF (2012): 0.356; Scopus: 21 (13)]
 28. Čech cocycles for differential characteristic classes: an ∞ -Lie theoretic construction. (with Jim Stasheff and Urs Schreiber) *Adv. Theor. Math. Phys.* 16 (2012), no. 1, 149–250. [journal IF (2012): 1.066; Scopus: 77 (58)]
 29. A period map for generalized deformations. (with Marco Manetti) *J. Noncommut. Geom.* 3 (2009), no. 4, 579–597 [journal IF (2009): 1.296; Scopus: 10 (5)]
 30. L_∞ structures on mapping cones. (with Marco Manetti) *Algebra Number Theory* 1 (2007), no. 3, 301–330. [journal IF (2010): 0.757; Scopus: 52 (40)]
 31. Graded Poisson algebras (with Alberto S. Cattaneo and Riccardo Longoni), *Encyclopedia of Mathematical Physics*, J.-P. Naber and G. Sheung Tsun Tsou Eds., Academic Press-Elsevier (2006), 560-567 [Scopus: 20 (20)]
 32. Graph complexes in deformation quantization (with Lucian M. Ionescu), *Lett. Math. Phys.*, Vol 73, No. 3 (2005), 193-208 [IF (2005): 1.212; Scopus: 3 (2)]
 33. *On the Hochschild-Kostant-Rosenberg map for graded manifolds* (with Alberto S. Cattaneo and Riccardo Longoni), *Int. Math. Res. Not. IMRN* 2005:62 (2005) 3899-3918 [journal IF (2005): 0.723; Scopus: 5 (4)]
 34. Sums over graphs and integration over discrete groupoids, *Applied Categorical Structures*, Vol. 14, No. 4 (2006), 313-350 [IF (2006): 0.468; Scopus: 1 (1)]
 35. Matrix integrals and Feynman diagrams in the Kontsevich model (with Riccardo Murri), *Advances in Theoretical and Mathematical Physics*, Vol. 7, No. 3 (2003) 525-576 [IF (2007): 2.980; Scopus: 0 (0)]
 36. Feynman diagrams via graphical calculus (with Riccardo Murri), *Journal of Knot Theory and Its Ramifications*, Vol. 11, No. 7 (2002) 1095-1131 [IF (2002): 0.386; Scopus: 4 (2)]
 37. Computing the Khovanov homology of 2 strand braid links via generators and relations (with Omid Hurson) arXiv:2407.09785
 38. Unital C_∞ -algebras and the real homotopy type of $(r-1)$ -connected compact manifolds of dimension $\leq l(r-1)+2$ (with Hong Van Le) arXiv:2310.19506

39. Fullness of exceptional collections via stability conditions - A case study: the quadric threefold (with Barbara Bolognese) arXiv:2103.15205
40. The (he)art of gluing. (with Giovanni Luca Marchetti) arXiv:1806.00883

Part X – Selected Addresses

Year	Title
2024	Projective representations of groups and anomalous QFTs, at <i>DG manifolds in Geometry and Physics</i> , Tsinghua Sanya International Mathematics Forum; Sanya.
2023	String bordism invariants in dimension 3 from $U(1)$ -valued TQFTs, at <i>GAP 2023 - Homotopy Algebras and Higher Structures</i> ; Institut Henri Poincaré; Parigi
2023	Almost formality of manifolds of low dimension, at Penn State University
2023	String bordism invariants in dimension 3 from $U(1)$ -valued TQFTs, at <i>Geometric/Topological Quantum Field Theories and Cobordisms</i> ; NYU Abu Dhabi
2022	String bordism invariants in dimension 3 from $U(1)$ -valued TQFTs, at ETH Zurich
2022	Gerstenhaber-type brackets from centers in (nice enough) monoidal categories, at <i>Workshop on Supergeometry and Bracket Structures in Mathematics and Physics</i> , Fields Institute, Toronto
2021	Mini-course on Knot Theory, Scuola Galileiana di Studi Superiori, Padova, January-February 2021 (on line)
2020	Formally integrable complex structures on higher dimensional knot spaces, at <i>Prague-Hradec Kralove seminar Cohomology in algebra, geometry, physics and statistics</i> , (on line)
2020	Almost formality of manifolds of low dimension, at <i>Seminario di Geometria ed Analisi Complessa</i> , Firenze
2020	Twisted cohomotopy and the level quantization of the 6d Wess-Zumino term, at <i>M-theory and Mathematics: An Interdisciplinary Workshop</i> ; NYU Abu Dhabi
2019	The Pangloss-Hirzebruch-Riemann-Roch theorem at <i>MPIM Topology Seminar</i> , MPIM, Bonn
2019	Higher brackets on cyclic and negative cyclic (co)homology, at <i>Quantum Days in Bologna</i> , Bologna
2018	T-duality in rational homotopy theory, in <i>Talks in Mathematical Physics</i> , ETH, Zurich
2018	(super-)Rational T-duality from (super-)L-infinity-algebras, at <i>Higher Structures in M-Theory</i> LMS/EPSRC Durham Symposium; Durham
2018	Mini-course on T-duality in rational homotopy theory at <i>Srni Winter School in Geometry and Physics</i> ; Srni
2017	T-duality in rational homotopy theory, at <i>LMS Midlands Regional Meeting</i> ; Loughborough
2017	T-duality in rational homotopy theory, at Universität Wien
2017	Formal Abel-Jacobi maps, at <i>2CinC: Cow and Calf in Cardiff</i> ; Cardiff
2017	T-Duality in Rational Homotopy Theory, at <i>Higher Structures Lisbon</i> ; Lisbon

- 2016 $\mathbb{Z}/2$ invariants of topological insulators as geometric obstructions, at Institut Camille Jordan, Lyon
- 2015 Group actions on boundary structures in Dijkgraaf-Witten theory, at *Higher TQFT and categorical quantum mechanics*; ESI, Vienna
- 2015 Mini-course on “Differential graded Lie algebras and formal moduli problems” in *Derived Algebraic Geometry, with a focus on derived symplectic techniques*, Warwick, April 2015
- 2014 Abel, Jacobi, and the double homotopy fiber, Department Colloquium, Göttingen
- 2014 Abel, Jacobi and the double homotopy fiber, at SISSA, Trieste
- 2014 Abel, Jacobi and the double homotopy fiber, at *Higher Structures in Algebraic Analysis*, Padova
- 2013 Relative quantum field theories as boundary TQFTs, at *GAP XI, Higher Geometry and Quantum Field Theory*, Pittsburgh, 2013
- 2013 L-infinity algebras of observables from higher prequantum line bundles, at the Higher Differential Geometry Seminar, MPIM, Bonn
- 2012 A stacky point of view on classical Chern-Simons theory, at ETH, Zurich
- 2011 The period map of a complex projective manifold: an infinity-category perspective, in *Quarterly Seminar on Topology and Geometry*, Universiteit Utrecht
- 2008 Sheaves of Lie algebras and DGLAs in deformation theory, in *CATS3*, Centro di Ricerca Matematica Ennio De Giorgi, Pisa
- 2008 Generalized periods of Kahler manifolds, in *Algebraic Structures in Geometry and Physics*, Leicester
- 2002 Moduli spaces, Feynman diagrams, and the KdV hierarchy, at *First Joint Meeting AMS-UMI, special session on Quantum Cohomology and Moduli Spaces*, Pisa

Conference organization:

- *Non Commutative Geometry & Higher Structures*, Thessaloniki, 2024
- *GAP 2024 - Moduli spaces, moduli stacks, and higher structures*, Roma, 2024
- *2nd International AMS-UMI Joint Meeting --special session on Special Geometries and Physics*, Palermo, 2024
- *Winter Meeting in Algebra and Geometry*, Roma, 2023
- *Higher structures in Caprarola*, Caprarola, 2023
- *Winter Meeting in Algebra and Geometry*, Roma, 2022
- *Geometry in Pairs*, Roma Tre, Roma 2019
- *Poisson Geometry and Higher Structures*, Istituto Nazionale di Alta Matematica, Roma, 2018
- *Noncommutative Geometry and Higher Structures*, University of Würzburg, 2017

Part XI – Activities as Member of Selection, Evaluation, or Admission Committees

- Member of the Evaluation Committee for an RTD-B-to-PA upgrade 01/A2 - MAT/03 at Department of Mathematics and Computer Science, University of Florence (2024)
- Member of an Admission Committee for the PhD scholarships in Mathematics in Sapienza University of Rome (2023)

- Member of the Selection Committee for an RTD-B position 01/A2 - MAT/03 at Department of Mathematics and Computer Science, University of Florence (2021)
- Member of an Admission Committee for the PhD scholarships in Mathematics in Sapienza University of Rome (2020)
- Member of the Selection Committee for PostDoc position in Mathematics at Department of Mathematics, Sapienza University of Rome (on three occasions in the period 2009-21)
- Member of an Evaluation Panel for National Science Centre Poland (2020)
- Referee and Project Evaluator for European Research Council, NSA Mathematical Sciences Grants Program, PISCOPIA Fellowship Programme Marie Curie Action
- Member of PhD Thesis defence committees in the universities of Rome Sapienza, Rome Tor Vergata, Milano, Paris 7, Vienna, Pittsburgh, ETH Zurich.

Part XII – Refereeing Activities

- *Referee for:* Advances in Mathematics, Compositio Mathematica, Journal of the European Mathematical Society, International Mathematics Research Notices, Communications in Mathematical Physics, Communications in Contemporary Mathematics, Algebraic & Geometric Topology, Journal of Geometry and Physics, Annali della Scuola Normale Superiore - Classe di Scienze, Annales Henri Poincaré, Journal of Mathematical Physics, Journal of Pure and Applied Algebra, Mathematical Physics, Analysis and Geometry, Homology, Homotopy and Applications, Mathematische Zeitschrift, Letters in Mathematical Physics, Topology and its Applications, International Journal of Geometric Methods in Modern Physics, Differential Geometry and its Applications, Reports on Mathematical Physics, SIGMA (Symmetry, Integrability and Geometry: Methods and Applications).
- *Reviewer for:* Mathematical Reviews, Zentralblatt MATH.

Part XIII – Popularization of Science Activities

- Lezioni a Palazzo - Tre stazioni per Arte-Scienza, *Che forma ha il Paradiso di Dante?*, Palazzo delle Esposizioni, Roma, 2021
- “*Pipistrelli, ornitorinchi e programmi che imparano da soli*” for La notte europea dei ricercatori 2021 - Programma scuole - Sapienza
- “*Secret life of pairs of points*”, for the European Community project *Atomium Culture* (Mathematics), 2012.
- “*Un punto diviso a metà*”, for “*Con la mente e con le mani*”, Accademia Nazionale dei Lincei – MIUR, 2013

- “*Il dilemma del rigorista*”, *Archimede*, 3 (2010), 124-128.
- Since 2008, lectures aimed at high school students for Progetto Lauree Scientifiche

Part XIV – Activities as Doctoral Advisor

Member of the PhD Advisory Board (Collegio del Dottorato) in Mathematics of Sapienza University of Rome since XXXV ciclo (2019).

Students advised:

- Chetan Vuppulury, Sapienza Università di Roma (expected defense: February 2025)
- Mattia Coloma, Università di Roma Tor Vergata (2022)
- Eugenio Landi, Università di Roma Tre (2022)
- Matteo Braghiroli, Sapienza Università di Roma (2017)
- Fosco Loregian, SISSA (2016)
- Alessandra Capotosti, Università di Roma Tre (2016)
- Fabio Trova, Università di Roma Tor Vergata (2015)
- Riccardo Murri, Scuola Normale Superiore (co-advised with Enrico Arbarello, 2013)

Part XV – Other Activities

Member of the following Advisory Boards:

- Commissione Strutture Didattiche e Scientifiche della Facoltà di Scienze MM.FF.NN. - Sapienza
- Commissione Biblioteca del Dipartimento di Matematica - Sapienza
- Commissione Tutorato del Dipartimento di Matematica - Sapienza
- Commissione Didattica del Dottorato in Matematica - Dipartimento di Matematica – Sapienza
- Commissione Intitolazione Aule del Dipartimento di Matematica - Sapienza

Roma, 17 Luglio 2024

