Andrea Loi: Curriculum Vitae et Studiorum.

Personal Details

Date of birth: September 28, 1969 Place of birth: Cagliari, Italy.

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Current Position

Full Professor at University of Cagliari (Italy).

Postgraduate studies

1998 Ph.D. in Mathematics at the University of Warwick, supervisor J. Rawnsley, dissertation titled *Quantization of Kähler manifolds and Holomorphic immersions in projective spaces*.

1994 Master in Mathematics at the University of Warwick, supervisor J. M. Micallef, dissertation titled *Deformation of complex structures : Complex Tori and K3 Surfaces*.

Skills

- Proficient in written and spoken English; good in written and spoken French.

Scientific travels

- Jussieu Paris (France) (22 February-24 February 2018)
- Luminy (France) (14 January–19 January 2018).
- University of Evora (Portugal) (1 September–06 September 2013).
- Visiting Professor, Institut Fourier de Mathmatiques (Grenoble) (9 January - 9 February 2012).
- University of München (Germany) (18-21/12/2011).
- University of Bilbao (Spain) (06-10/10 2011).
- The thirteenth international conference on Geometry, Integrability and Quantization; Varna (Bulgaria), (with a cast grant) (03-08/06 2011).
- Workshop on Symplectic Geometry, Contact Geometry, and Interactions; Department if Mathematics, Uppsala University (with a CAST grant) (27-29/1 2011).
- University of Sofia (Bulgary) (6-8/9 2010).
- University of Veliko Tarnovo (Bulgary) (8-10/9 2010)].

- Mathematics Institute, Princeton University (invitation by G. Tian);

  Courant Institute, Department of Mathematics New York (invitation by M. Gromov) (01/04-30/04 2008)

- University of Sofia (15/7-15/9 2003).

- I.H.E.S. (invitation by J. P. Bourguignon) (one month: October 1995)

- University of Warwick, England (1993-98)

- Mathematics Institute Louis Pasteur, Strasbourg (one year: 1990-91).

Invited speakers to the following conferences (last 15 years)

2024 *Dual Kähler metrics*, Differential Geometry Workshop in Lerici, April 8-10, 2024, Lerici, Italy.

2023 *Rigidity properties of holomorphic isometries into homogeneous Kähler manifolds*, The 7th workshop "Complex Geometry and Lie Groups" May 22- 26, 2023, Lecce, Italy.

2022 *Kähler-Einstein metrics and Kähler-Ricci solitons induced by complex space forms*, Firenze, 7th of April.

2020 *Kähler immersions into complex space forms: old and new results*, A Geometry Day in Como (on January 10th),

2018 *Symplectic coordinates on Kähler manifolds*, Sèminarie de Gèometrie Hamiltonienne, Jussieu Paris (France)

2018 *Kähler immersions of homogeneous Kähler manifolds into complex space forms*, CIRM Luminy (France), 14 January 2018.

2013 *The Gromov width of symmetric spaces*, XXII International fall workshop on Geometry and Physics, 2-5 September 2013, Evora (Portugal).

2012 *Kähler immersions of homogeneous Kähler manifolds into complex space forms*, Institut Fourier de Mathématiques (Grenoble), 24 Gennaio 2012.

2011 *Balanced metrics, TYZ expansion and Szegö kernel*, conference at the Mathematics Institute of the University of München, München (Germany) 20 Dicembre 2011.

2011 *Global Symplectic coordinates on Kähler manifolds*, EMS-RSME JOINT MATHEMATICAL WEEKEND, Bilbao, October 7-9, 2011.

2011 *Balanced metrics, Tian–Yau–Zelditch expansion and quantization of a Kähler manifold*, The thirteenth international international conference on Geometry, Integrability and Quantization, Varna (Bulgaria) 3-8 June 2011.

2011 *Metriche bilanciate, espansione di Tian–Yau–Zelditch e quantizzazione di una varietá di Kähler*, Geometry in Bicocca (Milan) 2011, 12-13 May 2011.

2010 *Kähler immersions of homogeneous Kähler manifolds into complex space forms* Global Analysis and PDE on Manifolds, IMI, BAS, SOFIA, 6-8 September 2010.

2010 *Kähler immersions of homogeneous Kähler manifolds nto complex space forms* ICDG (International Congress in Differential Geometry 2010, Veliko Tarnovo 8-10 September 2010.

2008 *Holomorphic immersions of Kähler-Einstein manifolds into complex space forms* (School and Conference on Differential Geometry, ICTP, Trieste, 2 June - 20 June 2008)

2008 *Symplectic duality between complex domains* (Extremal Kaehler metrics and Kaehler-Ricci flow, Centro De Giorgi, Pisa, 2 March - 29 March 2008).

Research interests

Kähler Immersions, Diastasis, and Projective Induction s I study holomorphic isometric immersions of real–analytic Kähler manifolds into complex space forms (finite or infinite dimensional), using Calabi's diastasis function as a diagnostic for projective inducibility and rigidity. Work includes classification results for homogeneous Kähler manifolds admitting immersions, criteria for immersion into $\mathbb{CP}^\infty$ or flat Hilbert space, and extensions of Calabi–type rigidity.

Balanced Metrics, Rawnsley's ϵ-function, and Quantization AsymptoticsI investigate the interplay between Donaldson balanced metrics and the Rawnsley (a.k.a. ϵ–) function from holomorphic quantization. Results include classifications of balanced metrics on Cartan domains, strong obstructions on Cartan–Hartogs domains (complex hyperbolic space appearing as the unique balanced case), analysis of homothetic deformations, and links to Tian–Yau–Zelditch Bergman kernel expansions.

Berezin / Geometric Quantization on Homogeneous Bounded DomainsI have established, with collaborators, Berezin quantizability for homogeneous bounded domains and studied how quantization data encode curvature, symmetry, and global analytic structure. These results connect representation–theoretic constructions with the existence of balanced or projectively induced Kähler metrics.

Canonical Kähler Metrics on Hartogs–Type and Symmetric DomainsI analyze existence, uniqueness, and explicit forms of canonical metrics—Kähler–Einstein, constant scalar curvature (cscK), extremal—on Hartogs domains fibred over symmetric bases and related noncompact settings. Techniques mix complex Monge–Ampère analysis, boundary geometry, and Bergman–type expansions; rigidity phenomena identify when natural Hartogs metrics reduce to complex hyperbolic geometry.

Regular Quantizations and Scalar CurvatureI study conditions under which a quantization sequence is "regular" in the sense that its ϵ–function stabilizes, and the geometric consequences—in particular implications for constant scalar curvature and related curvature conditions on polarized Kähler manifolds.

Geometric Methods in Mathematical Economics An applied strand employs differential–geometric structures—Riemannian metrics on equilibrium manifolds, geodesic projections, exponential retractions—to analyze equilibrium selection under parameter or endowment perturbations in general equilibrium models. The geometric viewpoint complements classical comparative statics and yields selection algorithms grounded in manifold geometry.

Organization of events

1. *Complex and Symplectic Geometry Workshop*, Cagliari 24-28 June 2024.
2. *Odysseus 2018*, Cagliari, 3-8 June 2018.
3. *Indam-Day*, Cagliari, 1 June 2018.
4. *Two days of Geometry in honor of Giusi D'Ambra*, Cagliari, 16-17 February 2018.
5. *Complex and Riemannian Geometry days*, Cagliari, 8-9 September 2016.
6. *New Trends in Differential Geometry*, Villasimius, 18-20 September 2014.

Pubblicazioni scientifiche

Complex, Kähler and Symplectic Geometry

1. C. Arezzo, C. Li, and A. Loi, *Gromov-Hausdorff limits and holomorphic isometries*, to appear in Math. Res. Lett.

2. A. Loi and G. Placini, *Any Sasakian structure is approximated by embeddings into spheres*, Forum Math. **37** (2025), no. 4, 1147–1160.

3. A. Loi, G. Placini, and M. Zedda, *Immersions into Sasakian space forms*, Math. Z. **307** (2024), no. 3.

4. S. Bonzio and A. Loi, *Embeddings of metric Boolean algebras in* $\mathbb{R}^N$, Topol. Appl. **347** (2024).

5. A. Loi and R. Mossa, *Rigidity of holomorphic isometries into homogeneous Kähler manifolds*, Proc. Amer. Math. Soc. **152** (2024), no. 7.

6. A. Loi and F. Zuddas, *Some characterizations of the complex projective space via Ehrhart polynomials*, Int. J. Math. **35** (2024), no. 2.

7. A. Loi, F. Salis, and F. Zuddas, *On canonical radial Kähler metrics*, Osaka J. Math. **60** (2023), no. 3, 545–554.

8. A. Loi and R. Mossa, *On holomorphic isometries into blow-ups of* $\mathbb{C}^\kappa$, Mediterr. J. Math. **20** (2023), no. 4, Paper No. 230.

9. A. Loi and S. Matta, *Robustness of induced statistical structures*, Topol. Appl. **327** (2023), Paper No. 108438.

10. A. Loi and R. Mossa, *Holomorphic isometries into bounded homogeneous domains*, Proc. Amer. Math. Soc. **151** (2023), no. 9, 3975–3984.

11. A. Loi, F. Salis, and F. Zuddas, *Kähler-Ricci solitons induced by infinite dimensional complex space forms*, Pac. J. Math. **316** (2022), 183–205.

12. A. Loi and R. Mossa, *KRS into definite or indefinite complex space forms*, Proc. Amer. Math. Soc. **149** (2021), no. 11, 4931–4941.

13. A. Loi, F. Salis, and F. Zuddas, *Extremal Kähler metrics induced by finite or infinite dimensional complex space forms*, J. Geom. Anal. **31** (2021), no. 8, 7842–7865.

14. A. Loi, M. Zedda, and F. Zuddas, *Ricci flat Calabi's metric is not projectively induced*, Tohoku Math. J. **73** (2021), 29–37.

15. A. Loi and F. Zuddas, *Partially regular and cscK metrics*, Int. J. Math. **31** (2020), no. 10, 2050079, 8 pp.

16. A. Loi, F. Salis, and F. Zuddas, *Characterization of complex space forms through Laplacians*, Abh. Math. Semin. Univ. Hambg. **90** (2020), no. 1, 99–109.

17. G. Bande, B. Cappelletti Montano, and A. Loi, *η-Einstein Sasakian immersions in non-compact Sasakian space forms*, Ann. Mat. Pura Appl. (4) **199** (2020), no. 6, 2117–2124.

18. A. Loi, R. Mossa, and F. Zuddas, *Finite TYCZ expansions and cscK metrics*, J. Math. Anal. Appl. **484** (2020).

19. B. Cappelletti Montano and A. Loi, *Einstein and η-Einstein Sasakian submanifolds in spheres*, Ann. Mat. Pura Appl. (4) **198** (2019), no. 6, 2195–2205.

20. F. Cannas Aghedu and A. Loi, *The Simanca metric admits a regular quantization*, Ann. Global Anal. Geom. **56** (2019), no. 3, 583–596.

21. A. Loi, R. Mossa, and F. Zuddas, *Bochner coordinates on flag manifolds*, Bull. Braz. Math.Soc. (N.S.) **50** (2019), 497–514.

22. A. Loi, F. Salis, and F. Zuddas, *On the third coefficient of TYZ expansion for radial scalar flat metrics*, J. Geom. Phys. **133** (2018), 210–218.

23. A. Loi, F. Salis, and F. Zuddas, *Two conjectures on Ricci flat metrics*, Math. Z. **290** (2018), 599–613.

24. B. Cappelletti Montano, A. Loi, and D. Zuddas, *On codimension one submanifolds of the real and complex projective space*, Topol. Appl. **232** (2017), 237–241.

25. A. Loi and F. Zuddas, *Explicit symplectic coordinates on Kähler manifolds*, in *Special Metrics and Group Actions in Geometry*, Springer INdAM Ser. **23**, Springer, Cham, 2017, 215–239.

26. A. Loi, R. Mossa, and F. Zuddas, *The log-term of the disc bundle over a homogeneous Hodge manifold*, Ann. Global Anal. Geom. **51** (2017), no. 1, 35–51.

27. A. Loi and M. Zedda, *The diastasis function of the Cigar metric*, J. Geom. Phys. **110** (2016), 269–276.

28. A. Loi and F. Zuddas, *On the Gromov width of homogeneous Kähler manifolds*, Diff. Geom. Appl. **47** (2016), 130–132.

29. C. Arezzo, A. Loi, and F. Zuddas, *Some remarks on the symplectic and Kähler geometry of toric varieties*, Ann. Mat. Pura Appl. (4) **195** (2016), 1287–1304.

30. A. Loi, R. Mossa, and F. Zuddas, *Symplectic capacities of Hermitian symmetric spaces of compact and noncompact type*, J. Symplectic Geom. **13** (2015), no. 4, 1049–1073.

31. A. Loi and R. Mossa, *Some remarks on homogeneous Kähler manifolds*, Geom. Dedicata **179** (2015), 1–7.

32. A. Loi and M. Zedda, *On the coefficients of the TYZ expansion of locally Hermitian symmetric spaces*, Manuscripta Math. **148** (2015), 303–315.

33. A. Loi, D. Uccheddu, and M. Zedda, *On the Szegö kernel of Cartan–Hartogs domains*, Ark. Mat. **54** (2015), no. 2, 473–484.

34. L. Cadeddu, S. Gallot, and A. Loi, *Maximizing mean exit-time of the Brownian motion on Riemannian manifolds*, Monatsh. Math. **176** (2015), no. 4, 551–570.

35. A. Loi, R. Mossa, and F. Zuddas, *Some remarks on the Gromov width of homogeneous Hodge manifolds*, Int. J. Geom. Methods Mod. Phys. **11** (2014), no. 2.

36. C. Arezzo, A. Loi and F. Zuddas, *Szego kernel, regular quantizations and spherical CR-structures*, Math. Z. **275** (2013), 1207–1216.

37. A. Loi and M. Zedda, *Global symplectic coordinates on gradient Kähler–Ricci solitons*, Monatsh. Math. **171** (2013), 415–423.

38. C. Arezzo, A. Loi and F. Zuddas, *On homothetic balanced metrics*, Ann. Global Anal. Geom. **41** (2012), no. 4, 473–491.

39. A. Loi, M. Zedda, and F. Zuddas, *Some remarks on the Kähler geometry of the Taub–NUT metrics*, Ann. Global Anal. Geom. **41** (2012), no. 4, 515–533.

40. A. J. Di Scala, A. Loi and H. Hishi, *Kähler immersions of homogeneous Kähler manifolds into complex space forms*, Asian J. Math. **16** (2012), no. 3, 479–488.

41. A. Loi and R. Mossa, *Berezin quantization of homogeneous bounded domains*, Geom. Dedicata **161** (2012), 119-128.

42. A. Loi and M. Zedda, *Calabi's inhomogeneous Einstein manifold is globally symplectomorphic to* $\mathbb{R}^{\not\vdash\times}$, Diff. Geom. Appl. **30** (2012), no. 2, 145-147.

43. A. Loi and M. Zedda, *Balanced metrics on Cartan and Cartan-Hartogs domains*, Math. Z. **270** (2012), no. 3-4, 1077-1087.

44. A. Loi and M. Zedda, *K–Einstein submanifolds of the infinite dimensional projective space*, Math. Ann. **350** (2011), 145-154.

45. A. Loi and R. Mossa, *The diastatic exponential of a symmetric space*, Math. Z. **268** (2011), no. 3–4, 1057-1068.

46. G. D'Ambra, R. De Leo and A. Loi, *Partially isometric immersions and free maps*, Geom. Dedicata **151** (2011), 79-95.

47. A. Loi and R. Mossa, *Uniqueness of balanced metrics on complex vector bundles*, J. Geom. Phys. **61** (2011), 312-316.

48. A. Loi and M. Zedda, *Balanced metrics on Hartogs domains*, Abh. Math. Sem. Univ. Hamburg **81** (2011), no.1, 69-77.

49. T. Gramchev and A. Loi , *TYZ expansion for some rotation invariant Kähler metrics*, in *Proceedings of the 2nd International Colloquium on Differential Geometry and Its Related Fields*, World Scientific, 2011, pp. 91-108.

50. A. Loi and M. Zedda, *A note on the* l^2*norm of the second fundamental form of algebraic manifolds*, Serdica Math. J. **36** (2010), 67-74.

51. A. J. Di Scala and A. Loi , *Kähler manifolds and their relatives*, Ann. Scuola Norm. Sup. Pisa Cl. Sci. (5) **9** (2010), 495-501.

52. A. J. Di Scala, A. Loi and F. Zuddas, *Symplectic duality between complex domains*, Monatsh. Math. **160** (2010), 403-428.

53. A. Loi and F. Zuddas, *Canonical metrics on Hartogs domains*, Osaka J. Math. **47** (2010), no. 2, 507-521.

54. A. Greco and A. Loi, *Radial balanced metrics on the unit disk*, J. Geom. Phys. **60** (2010), 53-59.

55. A. Loi and F. Zuddas, *Engliš expansion for Hartogs domains*, Int. J. Geom. Methods Mod. Phys. **6** (2009), no. 2, 233-240.

56. A. J. Di Scala, A. Loi and F. Zuddas, *Riemannian geometry of Hartogs domains*, Int. J. Math. **20** (2009), no. 2, 139-149.

57. T. Gramchev and A. Loi, *TYZ expansion for the Kepler manifold*, Comm. Math. Phys. **289** (2009), 825-840.

58. A. Loi and M. Zedda, *Cartan domains and indefinite Euclidean spaces*, Extracta Math. **23** (2008), no. 3, 255-263.

59. A. J. Di Scala, A. Loi and G. Roos, *The bisymplectomorphism group of a bounded symmetric domain*, Transform. Groups **13** (2008), no. 2, 283-304.

60. A. J. Di Scala and A. Loi, *Symplectic duality of symmetric spaces*, Adv.Math. **217** (2008), 2336-2352.

61. A. Loi and F. Zuddas, *Symplectic maps of complex domains into complex space forms*, J. Geom. Phys. **58** (2008), 888-899.

62. C. Arezzo, A. Ghigi and A. Loi, *Stable bundles and the first eigenvalue of the Laplacian*, J. Geom. Anal. **17** (2007), no. 3, 401-412.

63. F. Cuccu and A. Loi, *Balanced metrics on* $\mathbb{C}^n$, J. Geom. Phys. **57** (2007), 1115-1123.

64. G. D'Ambra and A. Loi, *Non-free isometric immersions of Riemannian manifolds*, Geom. Dedicata **127** (2007), 151-158.

65. A. J. Di Scala and A. Loi, *Kähler maps of Hermitian symmetric spaces into complex space forms*, Geom. Dedicata **125** (2007), 103-113.

66. A. Loi, *Regular quantizations and covering maps*, Geom. Dedicata **123** (2006), 73-78.

67. A. Loi, *Calabi's diastasis function for Hermitian symmetric spaces*, Differential Geom. Appl. **24** (2006), 311-319.

68. F. Cuccu and A. Loi, *Global symplectic coordinates on complex domains*, J. Geom. Phys. **56** (2006), no. 2, 247-259.

69. A. Loi, *A Laplace integral on a Kähler manifold and Calabi's diastasis function*, Differential Geom. Appl. **23** (2005), 55-66.

70. A. Loi, *Bergman and balanced metrics on complex manifolds*, Int. J. Geom. Methods Mod. Phys. **2** (2005), 553-561.

71. A. Loi, *A Laplace integral, the T–Y–Z expansion and Berezin's transform on a Kähler manifold*, Int. J. Geom. Methods Mod. Phys. **2** (2005), 359-371.

72. A. Loi, *Regular quantizations of Kähler manifolds and constant scalar curvature metrics*, J. Geom. Phys. **53** (2005), 354-364.

73. C. Arezzo and A. Loi, *A note on Kähler-Einstein metrics and Bochner's coordinates*, Abh. Math. Sem. Univ. Hamburg **74** (2004), 49-55.

74. C. Arezzo and A. Loi, *Moment maps, scalar curvature and quantization of Kähler manifolds*, Comm. Math. Phys. **243** (2004), 543-559.

75. A. Loi, *The Tian–Yau–Zelditch asymptotic expansion for real analytic Kähler metrics*, Int. J.Geom. Methods Mod. Phys. **1** (2004), no. 3, 253-263.

76. G. D'Ambra and A. Loi, *Inducing connections on $SU(2)$-bundles*, JP J. Geom. Topol. **3** (2003), no.1, 65-88.

77. C. Arezzo and A. Loi, *Quantization of Kähler manifolds and the asymptotic expansion of Tian-Yau-Zelditch*, J. Geom. Phys. **47** (2003), no. 1, 87-99.

78. A. Loi and G. D'Ambra, *A symplectic version of Nash C^1-isometric embedding theorem*, Differential Geom. Appl. **16** (2002), no. 2, 167-179.

79. A. Loi, *Holomorphic maps of Hartogs domains in complex space forms*, Riv. Mat. Univ. Parma (7) **1** (2002), 103-113.

80. A. Loi and R. Piergallini, *Compact Stein surfaces with boundary as branched covers of B^4*, Invent. Math. **143** (2001), no. 2, 325-348.

81. A. Loi and D. Zuddas, *Some remarks on Bergmann metrics*, Riv. Mat. Univ. Parma **6** (2001), no. 4, 71-86.

82. A. Loi, *The function epsilon for complex tori and Riemann surfaces*, Bull. Belg. Math. Soc. Simon Stevin **7** (2000), no. 2, 229-236.

83. A. Loi and P. Sitzia, *Explicit formulas for geodesics of homogeneous $SO(2)$-isotropic three-dimensional manifolds*, Adv. Math. **156** (2000), no. 1,1-22.

84. A. Loi, *Quantization of bounded domains*, J. Geom. Phys. **29** (1999), 1-4.

Mathematical Economics

85. A. Loi and S. Matta, *Endowments, patience types, and uniqueness in two-good HARA utility economies*, Economic Theory Bulletin **12** (2024), no. 2, 157-165.

86. A. Loi, S. Matta, and D. Uccheddu, *Equilibrium selection under changes in endowments: a geometric approach*, Journal of Mathematical Economics **108** (2023).

87. A. Loi and S. Matta, *Risk aversion and uniqueness of equilibrium in economies with two goods and arbitrary endowments*, The B.E. Journal of Theoretical Economics **23** (2023), no. 2, 679-696.

88. A. Loi and S. Matta, *Minimal entropy and uniqueness of price equilibria in a pure exchange economy*, Journal of Mathematical Economics **97** (2021).

89. A. Loi and S. Matta, *Curvature and uniqueness of equilibrium*, Journal of Mathematical Economics **74** (2018), 62-67.

90. A. Loi and S. Matta, *On the topology of the set of critical equilibria*, International Journal of Economic Theory **12** (2016), no. 2, 107-126.

91. A. Loi and S. Matta, *Increasing complexity in structurally stable models: an application to a pure exchange economy*, Journal of Mathematical Economics **57** (2015), 20-24.

92. A. Loi and S. Matta, *Structural stability and catastrophes*, Economics Bulletin **32** (2012), no. 4, 3378-3385.

93. A. Loi and S. Matta, *Measures of economies with an arbitrarily large number of equilibria*, International Journal of Economic Theory **8** (2012), no. 4, 337-343.

94. A. Loi and S. Matta, *Catastrophes minimization on the equilibrium manifold*, Journal of Mathematical Economics **47** (2011), 617-620.

95. A. Loi and S. Matta, *A note on the structural stability of the equilibrium manifold*, Journal of Mathematical Economics **46**(2010), no. 4, 591-594.

96. A. Loi and S. Matta, *Evolution paths on the equilibrium manifold*, Journal of Mathematical Economics **45** (2009) 854-859.

97. A. Loi and S. Matta, *Geodesics on the equilibrium manifold*, Journal of Mathematical Economics **44** (2008) no. 12, 1379-1384.

98. A. Loi and S. Matta, *A Riemannian metric on the equilibrium manifold: the smooth case*, Economics Bulletin **30** (2006) 1-9.

Mathematical Logic

99. S. Bonzio and A. Loi, *Probability over Plonka sums of Boolean algebras: states, metrics and topology*, International Journal of Approximate Reasoning **136** (2021), 14-35.

100. S. Bonzio and A. Loi, *The Płonka product of topological spaces*, Algebra Universalis **80** (2019), no. 3, 1–29.

101. S. Bonzio, A. Loi and L. Peruzzi, *A duality for involutive bisemilattices*, Studia Logica **107** (2019), no. 2, 423–444.

Games and Puzzle

S. Bonzio, A. Loi and L. Peruzzi, *On the $n \times n \times n$ Rubik's Cube*, Mathematica Slovaca **68** (2018), no. 5, 957–974.

102. S. Bonzio, A. Loi e L. Peruzzi, *On the $n \times n \times n$ Rubik's Cube*, Mathematica Slovaca **67** (2017), no. 3, 561–572.

Networks

103. F. Lilliu, A. Loi, D. Reforgiato Recupero e M. Sisinni, *An uncertainty-aware optimization approach for flexible loads of smart grid prosumers: A use case on the Cardiff energy grid*, Sustainable Energy, Grids and Networks **20** (2019).

Books

1. A. Loi, *Introduzione alla Topologia Generale*, Aracne Editrice, Roma, 2013.
2. A. Loi and M. Zedda, *Kähler immersions of Kähler manifolds into complex space forms*, Lecture Notes of the Unione Matematica Italiana, vol. 23, Springer, Cham, 2018.

Preprints

1. M. Damele and A. Loi, *Structural and rigidity properties of Lie skew braces*, `arXiv:2507.06214` [math.GR], 2025.
2. A. Loi, R. Mossa and F. Zuddas, *Kähler duality and projective embeddings*, `arXiv:2409.13263` [math.DG], 2024.
3. A. Loi and G. Placini, *Ricci iterations of well-behaved Kähler metrics*, `arXiv:2307.11500` [math.DG], 2023.