Short Vitae: **Maria Lucia FANIA**

- Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica, Università degli Studi dell'Aquila, Via Vetoio - Loc. Coppito, 67100 L'Aquila (Italia)

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ACADEMIC APPOINTMENTS

- Current Position: Professore Associato di Geometria, Università degli Studi dell'Aquila

- Visiting Assistant Professor, University of Notre Dame, USA, August 1988 - May 1989

- Ricercatore Universitario, Università degli Studi dell'Aquila, October 1985 - October 1992

- Guest Researcher, Max Planck Institut für Mathematik, Bonn, Germany, September 1984 - December 1985

- Teaching Assistant, University of Notre Dame, USA, 1980–1984

EDUCATION

- Ph.D. in Mathematics, May 1984, University of Notre Dame, USA

- Master in Mathematics, January 1981, University of Notre Dame, USA

- Laurea in Matematica, 1978, Università degli Studi dell'Aquila

RESEARCH INTERESTS

Algebraic Geometry. In particular: projective techniques of classification and special varieties. Linear systems and adjoint maps. Varieties of small codimension. Hilbert schemes.

RESEARCH STAYS AT MATHEMATICS INSTITUTES

- Max Planck Institut für Mathematik, Bonn (Germany), September 1984 - December 1985

- University of Notre Dame, Notre Dame, IN (USA), 1988-1989

- DePaul University, Chicago, USA, June 2003

SELECTED INVITED TALKS AT INTERNATIONAL CONFERENCES

- Homemade Algebraic Geometry, Celebrating Enrique Arrondo's 60th birthday, July 10th - 13th 2023, Alcalá de Henares

- Go 60, Pure & Applied Algebraic, Celebrating Giorgio Ottaviani's 60th Birthday, an Online CIRM-FBK Event, June 21-25, 2021

- Vector Bundles Days II, Pau-Trieste Workshop on Vector Bundles and Related Topics, Università di Trieste, January 29-31, 2014

- Workshop - "Algebraic Geometry: 2 days in Rome 2", Università di Roma "Tor Vergata", February 2-3, 2012

- Projective Algebraic Geometry in Milan, Università di Milano, June 11/12, 2009

- Meeting on Algebraic Varieties, Università di Roma Tre, December 1,18-20, 2003

- Workshop on Global Geometry of Algebraic Varieties, Facultad de Matemáticas, Universidad Complutense de Madrid, December 19-21, 2002

SELECTED ACADEMIC SERVICES

- (Elected) *President of the Corso di Laurea in Matematica* (Bachelor and Master Degree in Mathematics) November 1st, 2014 - October 19 2017

- Coordinator of the *Commissione Didattica del CAD di Matematica*, Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica

- Member of the *Collegio dei Docenti* of the PhD program Matematica e Modelli (up to 2019), Università degli Studi dell'Aquila

- (Elected) Member of the *Giunta di Dipartimento*, Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica,

- Member of the *Commissione Spazi di Dipartimento*, Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica

- Member of the *Commissione Didattica per il Nuovo Ordinamento 3+2*, Dipartimento di Matematica Pura e Applicata, Università dell'Aquila

- (Elected) Member of the *Giunta di Facoltà*, Facoltà di Scienze MM.FF.NN., Università dell'Aquila

SERVICES TO THE MATHEMATICAL COMUNITY

- *Referee* for International Mathematical Journals

- *Reviewer* for Zentralblatt für Mathematik

Preprint

- M.L. Fania, F. Flamini, *Ulrich Bundles on some threefold scrolls over* $\mathbb{F}_e$, submitted for publication

Published Papers

- M.L. Fania, A. Lanteri, *Hilbert curves of scrolls over threefolds*, J. Pure Appl. Algebra (2023) 107380, 1–20, https://doi.org/10.1016/j.jpaa.2023.107380

- M.L. Fania, A. Lanteri, Hilbert curves of quadric fibrations over smooth surfaces, Rend. Istit. Mat. Univ. Trieste, Vol. 54 (2022), Art. No. 18, 33 pages

- Ada Boralevi, Maria Lucia Fania, Emilia Mezzetti (2022) *Quadric surfaces in the Pfaffian hypersurface in* $\mathbb{P}^{14}$, Linear and Multilinear Algebra, vol. 70, No 19, 4675–4694, https://doi.org/10.1080/03081087.2021.1895048

- M.L. Fania, M. Lelli-Chiesa, J. Pons-Llopis, *Ulrich bundles on three dimensional scrolls*, Int. Math. Res. Notices, Vol. 2021, No. 17, pp. 13478-13507, doi.org/10.1093/imrn/rnz288

- M.L. Fania, A. Lanteri, *The main component of a reducible Hilbert curve of conic fibrations*, J. Korean Math. Soc. 58 (2021) No. 5, 1211–1226, DOI: 10.4134/JKMS.j200534

- M.L. Fania, A. Lanteri, *Hilbert curves of conic fibrations over smooth surfaces*, Communications in Algebra 49 (2021) no. 2, 545-566, DOI: 10.1080/00927872.2020.1807022

- M.L. Fania, F. Flamini, *Hilbert schemes of some threefold scrolls over* $\mathbb{F}_e$, Advances in Geometry, 2016; 16(4): 413-436.

- G.M. Besana, M.L. Fania, F. Flamini, *On families of rank-2 uniform bundles on Hirzebruch surfaces and Hilbert schemes of their scrolls*, Rend. Istit. Mat. Univ. Trieste, Volume 47 (2015), 27- 44.

- D. Faenzi, M.L. Fania, *On the Hilbert scheme of varieties defined by maximal minors*, Mathematical Research Letters 21 (2014), no 2, 297-311.

- G.M. Besana, M.L. Fania, F. Flamini, *Hilbert scheme of some threefold scrolls over the Hirzebruch surface* $\mathbb{F}_1$, Journal of the Mathematical Society of Japan 65, No. 4 (2013) pp.1243-1272. doi: 10. 2969/ jmsj /06541243.

- M.L. Fania, E. Mezzetti, *Vector spaces of skew–symmetric matrices of constant rank*, Linear Algebra and Its Applications 434 (2011), 2383-2403. DOI: 10.1016/j.laa.2010.12.029

- D. Faenzi, M.L. Fania, *Skew-symmetric matrices and Palatini scrolls*, Mathematische Annalen, 347 (2010), 859-883, DOI: 10.1007/s00208-009-0450-5

- M.L. Fania, E. Mezzetti, Erratum to: *On the Hilbert scheme of Palatini three- folds* [Adv. Geom. 2 (2002), no. 4, 371–389; MR1940444]. Advances in Geometry 8 (2008), no. 1, 153–154.

- E. Arrondo, M.L. Fania, *Evidence to subcanonicity of codimension two subvarieties of* $\mathbb{G}(1,4)$, International Journal of Mathematics 17, No. 2 (2006), 157-168

- A. Biancofiore, M. L. Fania, A. Lanteri, *Semipolarized nonruled surfaces with sectional genus two*, Beiträge zur Algebra und Geometrie 47, No. 1 (2006), 175-193

- G.M. Besana, M.L. Fania, *The dimension of the Hilbert scheme of special threefolds*, Communications in Algebra 33, No. 10 (2005), 3811–3829.

- M. Bertolini, M.L. Fania, *Low degree 3-folds in* $\mathbb{P}^6$, Mathematische Nachrichten 278, No. 1-2 (2005), 17-33.

- M. Beltrametti, M.L. Fania, A.J. Sommese, *A note on* $\mathbb{P}^1$*-bundles as hyperplane sections*, Kyushu Journal of Mathematics 59, No. 2 (2005), 301-306

- M.C. Beltrametti, M.L. Fania, *Fano threefolds as hyperplane sections*, Proceedings of the Conference: Projective varieties with unexpected properties, (Siena, June 8-13, 2004), edited by De Gruyter (2005), 19-34.

- M.C. Beltrametti, M.L. Fania, A.J. Sommese, Mukai varieties as hyperplane sections, Proceedings of The Fano Conference, Torino (2002), editori A. Collino, A. Conte, M. Marchisio, 185-208 (2004).

- M. L. Fania, E. Mezzetti, *On the Hilbert Scheme of Palatini threefolds*, Advances in Geometry, Vol. 2 (2002), 371–389.

- A. Biancofiore, M. L. Fania, *On the structure of linked 3-folds*, Revista Matemática Complutense vol. XIV, n.1 (2001), 17–45.

- M. L. Fania, *Fano manifolds as ample divisors*, Le Matematiche vol. LIV (1999) - Fasc. II, 243–259.

- M. L. Fania, G. Ottaviani, *Boundedness for codimension two submanifolds of quadrics*, Collectanea Mathematica 49 (1998), 293–315.

- M. L. Fania, E. L. Livorni, *Degree ten manifolds of dimension greater than or equal to 3*, Mathematische Nachrichten 188 (1997), 79–108.

- M. L. Fania, E. L. Livorni, *Degree nine manifolds of dimension greater than or equal to 3*, Mathematische Nachrichten 169 (1994), 117–134.

- M. L. Fania, E. L. Livorni, *Polarized manifolds (X,L) of dimension ≥ three, Δ-genus three, $dim Bs|L| \leq 0$ and degree $\geq 2\Delta(X,L)-1$*, Saitama Mathematical Journal 11 (1993), 41–58.

- M. L. Fania, *When K+(n-4)L fails to be nef*, Manuscripta Mathematica 79 (1993), 209–223.

- M. Beltrametti, M.L. Fania, A.J. Sommese, *On the discriminant variety of a projective manifold*, Forum Mathematicum 4 (1992), 529–547.

- M. L. Fania, E. L. Livorni, *Polarized surfaces of Δ-genus three*, Transactions of the American Mathematical Society 328 (1991), 445–463.

- M. Beltrametti, M.L. Fania, A.J. Sommese, *On the adjunction theoretic classification of projective varieties*, Mathematische Annalen 290 (1991), 31–62.

- H. D'Souza, M. L. Fania, *Varieties whose surface sections are elliptic*, Tohoku Mathematical Journal 42 (1990), 457–474.

- M. L. Fania, *Trigonal hyperplane sections of projective surfaces*, Manuscripta Mathematica 68 (1990), 17–34.

- A. Biancofiore, M.L. Fania, A. Lanteri, *Polarized surfaces with hyperelliptic sections*, Pacific Journal of Mathematics 143 (1990), 9–24.

- M. L. Fania, A. J. Sommese, *On the projective classification of smooth n-folds with n even*, Arkiv för Matematik 27 (1989), 245–256.

- M. L. Fania, A. J. Sommese, *Varieties whose hyperplane sections are P^k bundles*, Annali Scuola Norm. Sup. Pisa 2 (1988), 193–218.

- M. L. Fania, E. Sato, A. J. Sommese, *On the structure of fourfolds with a hyperplane section which is a P^1 bundle over a surface that fibres over a curve*, Nagoya Mathematical Journal 108 (1987), 1–14.

- M. L. Fania, *Configurations of -2 rational curves on sectional surfaces of n-folds*, Mathematische Annalen 275 (1986), 317–325.

- M. L. Fania, A. J. Sommese, *On the minimality of hyperplane sections of Gorenstein 3-folds*, In: Contributions to Several Complex Variables, Vieweg, E9 (1986), 89–113.

- M. L. Fania, *Extension of modifications of ample divisors on fourfolds: II*, Journal of the Mathematical Society of Japan 38 (1986), 285–294.

- M. L. Fania, *Extension of modifications of ample divisors on fourfolds*, Journal of the Mathematical Society of Japan 36 (1984), 107–120.