

CURRICULUM VITAE

Name: Paola D'Aquino

Positions:

November 2017-today full professor at Dipartimento di Matematica e Fisica, Università della Campania – “L. Vanvitelli”

March 2002 – October 2017 associate professor at Dipartimento di Matematica e Fisica, Seconda Università di Napoli

January 1996 –February 2002 researcher at Dipartimento di Matematica, Seconda Università di Napoli

Education:

- Ph.D. in Mathematics at University of Oxford
- Master in Mathematical Logic (2 years) at Università di Siena
- Laurea in Mathematics at Università di Siena

Recent Visiting positions awarded:

- MSRI, Berkeley, USA during the semester *Decidability, definability and computability in number theory* for six weeks from August 17 to December 18, 2020 (online due to Covid)
- UFR Mathématiques – Université Paris Diderot from 10 January to 10 February 2019
- MSRI, Berkeley, USA, two months in 2014, during the semester *Model Theory, Arithmetic Geometry and Number Theory*.

Recent Committees membership:

- Member of Scientific committee of XXVII Incontro AILA, Caserta September 2020 (postponed due to Covid)
- Member of Scientific committee of Model Theory and Applications 2020, Cetraro, June 2020 (postponed due to Covid)
- Member of Scientific committee of Special session in Mathematical Logic at Congresso Unione Matematica Italiana, Pavia, September 2019
- Member of Scientific committee of Special session in Mathematical Logic at *1st Joint Meeting Brazil-Italy in Mathematics*, Rio de Janeiro (Brasil), August 2016
- Member of the Executive Committee of the Association for Symbolic Logic since 1/01/2020
- Member of the Executive Committee of the Italian Association for Logica and Applications (AILA)

Editorial activity:

- editor of The Bulletin of Symbolic Logic since January 2017
- co-editor of “Model theory and Applications”, Quaderni di Matematica vol. 11 (2003), Seconda Università di Napoli
- co-editor dei Proceedings Logic Colloquium 2012, in Annals of Pure and Applied Logic, 167 (10), 2016.
- editor of the series Quaderni di Matematica published by Seconda Università di Napoli, from 2000 to today

Invited speaker in many international conferences in Europe and US

Teaching:

Undergraduate

Mathematical Logic, Commutative Algebra, Advanced algebra, Galois Theory, Model Theory, Algebra 2

Graduate course:

- Weak fragments of Peano Arithmetic, graduate course, at Universidad de Concepción, January 2018
- Model Theory, Dottorato in Scienze Matematiche e Informatiche, Università di Napoli "Federico II", 2013/2014
- Model Theory, Summer School in Mathematica Logic, Gargnano August 2012
- Weak fragments of Peano Arithmetic, graduate course, at Notre Dame University, Autumn 2000
- Graduate course at 11th European Summer School in Logic, Language and Information, Utrecht 9-15 August 1999.
- Peano Arithmetic, Dottorato in Logica matematica dell' Università di Siena, February 1994

Graduate students

- Angela Borrata (Università della Campania “L. Vanvitelli”) 3rd year
- Anna De Mase (Università della Campania “L. Vanvitelli”) 2st year
- Martina Liccardo (Università di Napoli “Federico II”) 3nd year

Past Graduate students

G. Terzo

M. Bovenzi

Institutional duties:

- Rector delegate of Libraries of Università della Campania “L. Vanvitelli”
- Erasmus coordinator for the Department of Mathematics and Physics
- Scientific coordinator of the Library of the Department of Mathematics and Physics at (first) Seconda Università di Napoli and (then) Università della Campania “L. Vanvitelli”

Publications

- [1] “Generic solutions of equations with iterated exponentials” (in collaborazione con A. Fornasiero and G. Terzo) in Transactions of the American Mathematical Society, 370, (2018), 1393-1407.
- [2] “Model theory of some local rings” (in collaboration with A. Macintyre), in IfCoLog Journal of Logics and their Applications, vol 4, N. 4, (2017), College Publications, 885-899.
- [3] “On the value group of a model of Peano Arithmetic”, (in collaborazione con M. Carl and S. Kuhlmann), in Forum Mathematicum, vol. 29, n. 4, (2017), 951-958.
- [4] “A note on \aleph_{α} -saturated ω -minimal expansions of real closed fields”, (in collaboration with S. Kuhlmann), in Algebra and Logic, vol. 54, n. 6, (2016), 502-506
- [5] “Comparing \mathbb{C} and Zilber’s Exponential fields: zero sets of exponential polynomials” (in collaboration with A. Macintyre and G. Terzo) in Journal of the Institute of Mathematics Jussieu, vol. 15, (1), (2016), 71-84
- [6] “A valuation theoretic characterization of recursively saturated real closed fields” (in collaboration with S. Kuhlmann and K. Lange), in The Journal of Symbolic Logic, 80, (2015), 194-206
- [7] “From Schanuel’s Conjecture to Shapiro’s Conjecture” (in collaboration with A. Macintyre and G. Terzo) in Commentarii Mathematici Helvetici, 89, (2014), 597-616
- [8] “Primes in models of $\mathcal{I}\Delta_0+\Omega_1$ ”, (in collaboration with A. Macintyre), in Studies in Weak Arithmetic (Cégielski P, Cornaros C, Dimitracopoulos C, ed.) CSLI Publications, Journées sur les Arithmétiques Faibles 31, (2013), 85-92
- [9] “Real closed exponential fields”, (in collaboration with J. Knight, S. Kuhlmann and K. Lange), in Fundamenta Mathematicae, 219, (2012), 163-190.
- [10] “Limit computable integer part”, (in collaboration with J. Knight and K. Lange), in Archive of Mathematical Logic vol. 50, (2011), 681-695.
- [11] “Quadratic forms over models of $\mathcal{I}\Delta_0+\Omega_1, \text{II}$ ”, (in collaboration with A. Macintyre), in Annals of Pure and Applied Logic. 162, (2011), 447-456.
- [12] “Schanuel Nullstellensatz for Zilber fields” (in collaboration with A. Macintyre and G. Terzo) in Fundamenta Mathematicae, 207, (2010), 123-143.
- [13] “Real closed fields and models of Peano Arithmetic” (in collaboration with J. Knight and S. Starchenko), in The Journal of Symbolic Logic, vol. 75, N. 1, 1-11.
- [14] “A note on the decidability of exponential terms” (in collaboration with G. Terzo), in Mathematical Logic Quarterly, 53, N. 3 (2007), 306-310.
- [15] “Strong initial segments of models of $\mathcal{I}\Delta_0$ ” (in collaboration with J. Knight) in Fundamenta Mathematicae, 195, N. 2, (2007), 155-176.
- [16] “Quadratic forms over models of $\mathcal{I}\Delta_0+\Omega_1, \text{I}$ ”, (in collaboration with A. Macintyre), in Annals of Pure and Applied Logic, 148 (2007), 31-48
- [17] “Weak Fragments of Arithmetic”, in The Notre Dame Lectures, Association for Symbolic Logic 18, A K Peters, 2005, 149-184.
- [18] “Coding in $\mathcal{I}\Delta_0$ ”, (in collaboration with J. Knight) in Contemporary Mathematics vol. 361, (2004), 23-36
- [19] “Quotient fields of models of $\mathcal{I}\Delta_0+\Omega_1$ ”, in Mathematical Logic Quarterly 47 (2001) 3, 305-314.
- [20] “Non standard finite fields over $\mathcal{I}\Delta_0+\Omega_1$ ”, (in collaboration with A. Macintyre), Israel Journal of Mathematics 117 (2000), 311-333
- [21] “Solving Pell equations locally in models of $\mathcal{I}\Delta_0$ ”, Journal of Symbolic Logic, vol 63, 1998, 402-410
- [22] “Towards the limits to the Tennenbaum phenomenon”, Notre Dame Journal of Formal Logic, 38, 1997, 81-92
- [23] “Pell equations and exponentiation in fragments of arithmetic”, Annals of Pure and Applied Logic 77, 1996, 1-34
- [24] “ Δ_0 -complexity of the relation $y=\prod_{i<n}F(i)$ ”, (in collaboration with A. Berarducci) Annals of Pure and Applied Logic, 75, 1995, 49-56
- [25] “A sharpened version of McAloon theorem”, Annals of Pure and Applied Logic 61, 1993, 49-62
- [26] “Local behaviour of Chebyshev theorem in models of $\mathcal{I}\Delta_0$ ”, Journal of Symbolic Logic, vol 57, (1), 1992, 12-27
- [27] “The structure of countable recursively saturated models”, in Bollettino Unione Matematici Italiani, (7), 5B, 1991, 815-838
- [28] “Topological duality for diagonalizable algebras”, (joint with C. Bernardi) Notre Dame Journal of Formal Logic, vol. 29, (3) 1988, 345-364
- [29] “A weak version of the strong exponential closure”, (joint with A. Fornasiero and G. Terzo) to appear in Israel Journal of Mathematics
- [30] “Truncations of ordered abelian groups”, (joint with J. Derakhshan and A. Macintyre) to appear in Algebra Universalis