



Francesca Spagnuolo

Mathematician, Ph.D

UNIVERSITY EDUCATION

- 2013–2017 **International PhD in Mathematics**, *Facultat de Ciènces Matemàtiques*, Universitat de València, Spain
Home: <http://www.uv.es/uvweb/matematiques/es/>.
GPA: **Summa cum laude**
DISSERTATION THESIS
title *Some results on locally finite groups*
supervisor Prof. Adolfo Ballester Bolinches, *Facultat de Ciènces Matemàtiques, Universitat de València, Spain*
co-supervisor Prof. Francesco de Giovanni, *Facoltà di Scienze Matematiche, Fisiche e Naturali, Università Degli Studi Di Napoli "Federico II", Italy*
description In the first part of the thesis we studied some classes of hyperfinite p -groups that determine p -nilpotency locally. In the second part we focused on groups with infinite rank, and in particular we studied locally finite groups of infinite rank whose subgroups of infinite rank have some permutable properties. In last chapter we studied finite semimodular groups and the connexion between semimodular subgroups and supersolubility.
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- 2008–2011: **M.Sc. in Mathematics**, *Facoltà di Scienze Matematiche, Fisiche e Naturali*, Università Degli Studi Di Napoli "Federico II", Italy
Home: <http://www.scienze.unina.it/>.
GPA: 110 out of 110, **cum laude**
DISSERTATION THESIS
title *Groups with Černikov conjugacy classes*
supervisor Prof. Francesco de Giovanni, *Facoltà di Scienze Matematiche, Fisiche e Naturali, Università Degli Studi Di Napoli "Federico II", Italy*
description We studied some properties of the groups with Černikov conjugacy classes such as the embedding of CC -groups. We also compared these properties with those found in the more general FC -groups
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2004–2008: **B.Sc. in Mathematics**, *Facoltà di Scienze Matematiche, Fisiche e Naturali*, Università Degli Studi Di Napoli “Federico II”, Italy
Home: <http://www.scienze.unina.it/>.
GPA: 110 out of 110, *cum laude*

DISSERTATION THESIS

title *Operations on Cardinal Numbers and the Axiom of Choice*
supervisor Prof. Roberto Tortora, *Facoltà di Scienze Matematiche, Fisiche e Naturali*
description We studied the operations that can be made on infinite cardinal numbers with and without the axiom of choice. We also analyzed some propositions equivalent to the axiom of choice and compare the results obtained in both cases

ACADEMIC POSITIONS

2018–Present Lecturer in MCS Major (Mathematics)
Yale-NUS College, Singapore

COURSES TAUGHT

2019–20/S2 Proof & Geometry and the Emergence of Perspective. Yale-NUS College, Singapore
2019–20/S1 Introduction to Modern Algebra & Introduction to Real Analysis & Proof. Yale-NUS College, Singapore
2018–19/S2 Geometry and the Emergence of Perspective & Discrete Mathematics. Yale-NUS College, Singapore
2018–19/S1 Scientific Inquiry 2 & Introduction to Modern Algebra. Yale-NUS College, Singapore
2017–18/S2 Conceptual Calculus & Foundations of Applied Mathematics. Yale-NUS College, Singapore
2015–16/S2 Mathematics I in Engineering degree, 60 hours of Problem Session. Universitat de València, Spain

PUBLICATIONS

- **On locally finite groups whose subgroups of infinite rank have some permutable property**
Ballester-Bolinches, A., Camp-Mora, S., Dixon, M.R., Ialenti, R. & **Spagnuolo, F.**
accepted *Annali di Matematica Pura e Applicata* (1923-).
- **On Sylow permutable subgroups of finite groups**
Ballester-Bolinches, A., Heineken, H. & **Spagnuolo, F.**
accepted *Forum Mathematicum*.
- **On groups whose subgroups of infinite rank are Sylow permutable**
Ballester-Bolinches, A., Camp-Mora, S., Kurdachenko, L. A., & **Spagnuolo, F.**
Annali di Matematica Pura ed Applicata (1923-), 195(3), 717-723 (2016).

- **On p -nilpotency of hyperfinite groups**
Ballester-Bolinches, A., Camp-Mora, S., & **Spagnuolo, F.**
Monatshefte für Mathematik, 176(4), 497-502 (2015).
- **A bound on the p -length of P -solvable groups**
Gonzalez-Sanchez, J., & **Spagnuolo, F.**
Glasgow Mathematical Journal, 57(01), 167-171 (2015).

GRANTS

- 2020: Summer Teaching Innovation Grant from Yale-NUS, used on academic training (Course: Promoting Active Learning Online by ACUE)
- 2016: Three-month Travel Grant from the Spanish Ministry of Education, Culture and Sports, Spain (**FPU** program) for a research stay at the Institut für Mathematik, Julius-Maximilians-Universität Würzburg, Würzburg, Germany
- 2015: Three-month Travel Grant from the Spanish Ministry of Education, Culture and Sports, Spain (**FPU** program) for a research stay at Department of Mathematics, Univeristy of Alabama, Tuscaloosa, Alabama, US
- 2013: Four-year PhD Grant from the Spanish Ministry of Education, Culture and Sports, Spain (**FPU** program) to be completed at the Dept. of Algebra, Mathematics Faculty, Universitat de Valencia
- 2012: Two-month Grant from the University of the Basque Country, Spain for a research stay at the Group Representations and Combinatorial Algebra group, and to assist to the “Advanced International School on Galois Groups” organized by the Iberian Network of group Theory, 9–27 of July, 2012
- 2009–2010: Erasmus Grant from the Università Degli Studi Di Napoli “Federico II”, Italy for a one-year scholarship at the Universidad de Zaragoza

RESEARCH MEETINGS TALKS & POSTER PRESENTATIONS

- 2016: *On locally finite groups whose subgroups of infinite rank have some permutabile property*
BALLESTER-BOLINCHES, A., CAMP-MORA, S., DIXON, M.R., IALENTI, R., **Spagnuolo, F.**
XI Encuentro en Teoría de Grupos (Oral Presentation)
Barcelona, Spain
- 2016: *On class of groups that controls some embedding property*
Spagnuolo, F.
Invited Tolk at Fakultät für Physik und Astronomik Julius-Maximilian-Universität Würzburg (Oral Presentation)
Würzburg, Germany
- 2016: *On locally finite groups whose subgroups of infinite rank have some permutabile property*
Spagnuolo, F.
Invited Tolk at Institut für Mathematik Julius-Maximilian-Universität Würzburg (Oral Presentation)
Würzburg, Germany

- 2016: *Groups with all subgroups of infinite rank (S-)semipermutable*
 BALLESTER-BOLINCHES, A., CAMP-MORA, S., DIXON, M.R., IALENTI, R.,
Spagnuolo, F.
 Ischia Group Theory (Poster Presentation)
Ischia, Naples, Italy
- 2015: *On groups of infinite rank whose subgroups of infinite rank have some property*
Spagnuolo, F.
 Invited Talk at the Auburn University at Montgomery (Oral Presentation)
Montgomery, Alabama, US
- 2015: *On some rank of groups and on groups of infinite rank whose subgroups of infinite rank have some property*
Spagnuolo, F.
 Invited Talks at University of Alabama (Oral Presentation)
Tuscaloosa, Alabama, US
- 2013: *On the p-length of hyperfinite groups*
 BALLESTER-BOLINCHES, A., CAMP-MORA, S., **Spagnuolo, F.**
 Advanced in Group Theory and Applications 2013 (Oral Presentation)
Porto Cesareo, Lecce, Italy

RESEARCH STAYS

- Apr–Jun: Institut für Mathematik, Julius–Maximilian–Universität Würzburg, Würzburg, Ger-
 2016 many
Supervisor: Prof. Hermann Heineken
- Sept–Dec: Univeristy of Alabama, Tuscaloosa, Alabama, US
 2015 **Supervisor:** Prof. Martyn R. Dixon
- Sept–Oct: Facoltà di Scienze Matematiche, Fisiche e Naturali, Università Degli Studi Di Napoli
 2014 “Federico II”
Supervisor: Prof. Francesco de Giovanni
- May–Jun: Facoltà di Scienze Matematiche, Fisiche e Naturali, Università Degli Studi Di Napoli
 2014 “Federico II”
Supervisor: Prof. Francesco de Giovanni

POST-GRADUATE COURSES & TRAININGS

- Jun 2014: *Advances in Group Theory and Applications–The School*
Porto Cesareo, Lecce, Italy
- May 2014: *On some ranks of groups*. Series of seminars by Prof. L.A.Kurdachenko
Università Federico II di Napoli, Naples, Italy
- May 2014: *Some groups with subgroups of certain types: a survey*. Series of seminars by
 Prof. M.R.Dixon
Università Federico II di Napoli, Naples, Italy
- Jun–Jul: *Summer school on Galois theory*
 2012 **Universidad del Pais Vasco**, Bilbao, Spain

LANGUAGES

- Italian **mother tongue**
- Spanish **native or bilingual proficiency** (B2 level in the [DELE](#) from the “Instituto Cervantes”, Spain)
- English **full professional proficiency (First Certificate English** (B2 level) in the [Cambridge Institute](#) certification exam, awarded by the “ Cambridge Institute”, UK)