

D. SC. MAURICIO GABRIEL MEDINA BÁRCENAS

PERSONAL INFORMATION

Place of birth México City, México 22 September 1987
email mmedina@fcfm.buap.mx
phone +52 5520671427
website <http://www.medina-barcenas.com>

CURRENT POSITION

Postdoc Position August 2019 Benemérita Universidad Autónoma de Puebla,
Puebla, México.

PREVIOUS POSITIONS

Fulbright Scholar September
2018- June Northern Illinois University, Dekalb, IL. US.
2019

Postdoc Prositon January 2017-
June 2018 Chungnam National University, Daejeon, Repub-
lic of Korea.

EDUCATION

Doctor of Sciences
(Mathematics) 2012-2016 National Autonomous University of México (UNAM),
Institute of Mathematics.
Graduation date: 22 September 2016.
Thesis: *Some generalizations of ring theory in categories of Wisbauer.*
Advisor: Prof. Dr. José Ríos MONTES.

Master of Sciences
(Mathematics) 2010-2012 National Autonomous University of México
(UNAM), Faculty of Sciences.
General knowledge exams: *Algebra (Group theory and Galois theory), Algebraic
Topology and Differential Geometry.*
Thesis: *Localizaciones Bilaterales.*
Advisor: Prof. Dr. Alejandro ALVARADO GARCÍA.

Bachelor of
Sciences 2005-2009 National Autonomous University of México
(UNAM), Faculty of Sciences
Thesis: *Descomposición de módulos usando submódulos de tipo.*
Advisor: Prof. Dr. Alejandro ALVARADO GARCÍA.

PUBLICATIONS

Communications
in Algebra On Strongly harmonic and Gelfand modules
Authors: Mauricio MEDINA-BÁRCENAS, Lorena MORALES-CALLEJAS, Martha
Lizbeth Shaid SANDOVAL-MIRANDA and Angel ZALDÍVAR-CORICHI.
<https://doi.org/10.1080/00927872.2019.1710167>

Σ -Rickart modules

*Journal of Algebra
and its
Applications*

Authors: Gangyong LEE, Mauricio MEDINA-BÁRCENAS.
<https://doi.org/10.1142/S0219498820502072>

Abelian endoregular modules

*Journal of Algebra
and its
Applications*

Authors: Mauricio MEDINA-BÁRCENAS and Hanna SIM.
<https://doi.org/10.1142/S0219498820502023>

2019 Boolean perspectives of modules categories and idioms

*Applied
Categorical
Structures*

Authors: Jaime CASTRO PÉREZ, Mauricio MEDINA BÁRCENAS, José RÍOS MONTES and Angel ZALDÍVAR CORICHI.
Appl. Categ. Structures 27,1 (2019), 65–84

2018 Boyle's Conjecture and Perfect Localizations

*Communications
in Algebra*

Autores: Jaime CASTRO PÉREZ, Mauricio MEDINA BÁRCENAS, José RÍOS MONTES, Angel ZALDÍVAR CORICHI
Comm. Alg. 46, 12 (2018), 5234–5240.

2018 Primitive Submodules, Co-semisimple and Regular Modules

*Taiwanese Journal
of Mathematics*

Authors: Mauricio MEDINA-BÁRCENAS and Çiğdem ÖZCAN.
Taiwan. J. Math. 22, 3 (2018), 545–565.

2018 On the structure of Goldie modules.

*Communications
in Algebra*

Authors: Jaime CASTRO PÉREZ, Mauricio MEDINA BÁRCENAS, José RÍOS MONTES and Angel ZALDÍVAR CORICHI.
Comm. Alg. 46, 7 (2018), 3112–3126.

2018 Attaching topological spaces to a module I: Sobriety and Spatiality

*Journal of Pure
and Applied
Algebra*

Authors: Mauricio MEDINA-BÁRCENAS, Lorena MORALES-CALLEJAS, Martha Lizbeth Shaid SANDOVAL-MIRANDA and Angel ZALDÍVAR-CORICHI.
JPAA 222, 5 (2018), 1026–1048.

2018 On some operators and dimensions in modular meet-continuous lattices.

*Journal of Algebra
and its
Applications*

Authors: Mauricio MEDINA BÁRCENAS, José RÍOS MONTES Angel ZALDÍVAR CORICHI.
J. Alg. Appl. 17, 5 (2018),.

2017 Modules with ascending chain condition on annihilators and Goldie modules.

*Communications
in Algebra*

Authors: Jaime CASTRO PÉREZ, Mauricio MEDINA BÁRCENAS and José RÍOS MONTES
Comm. Alg. 45, 6 (2017), 2334–2349.

2016 A generalization of quantales with applications to modules and rings.

*Journal of Pure
and Applied
Algebra*

Authors: Mauricio MEDINA-BÁRCENAS, Angel ZALDÍVAR-CORICHI and Martha Lizbeth Shaid SANDOVAL-MIRANDA.
JPAA 220 (2016), 1837–1857.

2016 On Semiprime Goldie Modules.

*Communications
in Algebra*

Authors: Jaime CASTRO PÉREZ, Mauricio MEDINA BÁRCENAS, José RÍOS

MONTES and Angel ZALDÍVAR CORICHI
Comm. Alg. 44, 11 (2016), 4749–4768.

PAPERS SUBMITTED AND PREPRINTS

- Fully prime modules and fully semiprime
modules
- Submitted* Authors: John BAECHY, Mauricio MEDINA-BÁRCENAS.
- A note on dual square free modules
- Submitted* Authors: Mauricio MEDINA-BÁRCENAS, Derya Keskin TÜTÜNCÜ, Yosuke KURATOMI.
- On the de Morgan's laws for modules
- Submitted* Authors: Mauricio MEDINA-BÁRCENAS, Martha Lizbeth Shaid SANDOVAL-MIRANDA and Angel ZALDÍVAR-CORICHI.

IN PREPARATION

- Finite Σ -Rickart modules
- Authors: Gangyong LEE, Mauricio MEDINA-BÁRCENAS.
- Morita invariance of universal localization
- Authors: John BAECHY, Mauricio MEDINA-BÁRCENAS.
- Operators between classes of modules given by
preradicals
- Authors: Alejandro ALVARADO-GARCÍA, César CEJUDO-CASTILLA, Mauricio MEDINA-BÁRCENAS, Fernando VILCHIS-MONTALVO.
- On quasi-duo modules
- Authors: Mauricio MEDINA-BÁRCENAS and Çiğdem ÖZCAN.

RESEARCH VISITS

March-June 2016 Hacettepe University, Ankara, Turkey.

LECTURES

- | | |
|---|---|
| <p><i>Facultad de
Ciencias Físico
Matemáticas,
BUAP</i></p> | <p>2020 Instructor</p> <ol style="list-style-type: none"> 1. Introducción a las estructuras algebraicas (Semester: 2020-spring). 2. Graduated course on Algebra 'Tilting modules' (Semester: 2020-spring). |
| <p><i>Faculty of Science,
UNAM</i></p> | <p>2011–2016 Instructor</p> <ol style="list-style-type: none"> 1. Superior Algebra 2 (Semester: 2016-fall, 2013-spring and 2011-fall). 2. Modern Algebra 4 (Semester: 2015-fall). |

3. Modern Algebra 3 (Semester: 2015-spring).
4. Modern Algebra 2 (Semester: 2014-fall).
5. Modern Algebra 1 (Semester: 2014-spring).
6. Linear Algebra 2 (Semester: 2013-fall and 2012-fall).

2010–2016 Teaching Assistant

Faculty of Science,
UNAM

1. Topology Seminar B (Semester: 2016-fall).
2. Graduate Algebra course (Master Level) (Semester: 2015-fall).
3. Algebra Seminar A (Semester: 2015-spring).
4. Superior Algebra 1 (Semester: 2014-fall).
5. Algebra Seminar B (Semester: 2014-spring).
6. Modern Algebra 4 (Semester: 2013-fall).
7. Modern Algebra 3 (Semester: 2013-spring).
8. Modern Algebra 2 (Semester: 2011-fall).
9. Modern Algebra 1 (Semester: 2011-spring).
10. Linear Algebra 1 (Semester: 2010-fall).

CONFERENCES

- | | | |
|---|---------------------|--|
| <i>Attaching topological spaces to a module</i> | <i>April 2018</i> | Korean Mathematical Society (KMS) Spring Meeting, Kyung Hee University, Seoul, South Korea. |
| <i>Boyle's conjecture and perfect localizations</i> | <i>June 2017</i> | International Conference on Algebraic Topology and Ring Theory 2017, Chungnam National University, Daejeon, South Korea. |
| <i>Does an R-module look like a ring?</i> | <i>April 2016</i> | General Seminars at Department of Mathematics, Hacettepe University. |
| <i>Modulos que satisfacen ACC en anuladores</i> | <i>October 2015</i> | LXVIII Congreso Nacional de la Sociedad Matemática Mexicana Hermosillo, Sonora, México. |
| <i>El casi-cuantal de un modulo</i> | <i>October 2015</i> | Jornadas de Algebra 2015, Ciudad de México, México. |
| <i>Modules which satisfy ACC on annihilators</i> | <i>June 2015</i> | Noncommutative rings and their applications IV, Lens, France. |
| <i>On semiprime Goldie modules</i> | <i>June 2014</i> | International Workshop on Algebra and Applications, Fez, Morocco. |
| <i>Semiprime Goldie modules</i> | <i>May 2014</i> | 32nd Ohio State-Denison Conference, Ohio University, Columbus, Ohio, U.S.A. |
| <i>Encontrando Ceros</i> | <i>October 2013</i> | XLVI Congreso Nacional de la Sociedad Matemática Mexicana, Merida, Yucatan, México. |
| <i>Localizaciones Bilaterales</i> | <i>October 2012</i> | XLV Congreso Nacional de Sociedad Matemática Mexicana, Queretaro, Queretaro, México. |

UNDERGRADUATE STUDENTS

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|------------------------|-------------|--|
| <i>Bachelor Thesis</i> | <i>2016</i> | "Sobre módulos inyectivos principales" written by Esteban Martínez, Faculty of Sciences, National Autonomous University of México. |
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OTHER INFORMATION

2012-2016 Aquelarre Matemático.

Organizer *Aquelarre Matemático* is a one-week conferences meeting, celebrated at Faculty of Sciences, UNAM, every year where graduate students give talks to undergraduate students in many different topics in mathematics.

Computation skills Basic: PYTHON, L^AT_EX, OpenOffice, Linux, Microsoft Windows

Languages SPANISH · Mothertongue
ENGLISH · Intermediate (TOEFL iBT score: 79)

Interests Bicycle · Bikepolo · Traveling

June 15, 2020