

**Linked data for Holdings and
Cataloging: The first step is the
hardest!**

**Violeta Ilik
Texas A&M University Library
01/27/2013
ALA Midwinter 2013, Seattle, WA**



free, open-source visualization
platform



“sophisticated, robust, transparent
and easy to use”

Texas A&M University - 2,800 plus faculty members



Texas A&M University - 2,800 plus faculty members



Heisman trophy winner - Johnny Manziel

Texas A&M University - data about its faculty members, research areas, PhD granting institutions, VIAF, etc.

Texas A&M University Mathematics Department

- 76 tenure track and tenured professors
- 25 visiting faculty
- 29 lecturers

Data can be imported in various formats:

- Spreadsheets - xls only
- XML MODS files
- Dublin Core Data from OAI-PMH
- Some instances of ContentDM

User guide:

<http://viewshare.org/about/userguide/#s3.2.4.1>

Enabled	Field Name	 Add	Type	Value	1 of 76	 	 Delete Record
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<input checked="" type="checkbox"/>	 PhD location		location	42.4406, -76.4969			
<input checked="" type="checkbox"/>	 Research area		text	Algebra			
<input checked="" type="checkbox"/>	 Bachelor granting insitution		text	Universidad de Uruguay			
<input checked="" type="checkbox"/>	 Department page		URL	http://www.math.tamu.edu/directory/formalpg.php?user=maguiar			
<input checked="" type="checkbox"/>	 Name		text	Aguiar, Marcelo			
<input checked="" type="checkbox"/>	 PhD granting institution		text	Cornell University			
<input checked="" type="checkbox"/>	 Master granting institution		text	No Value			
<input checked="" type="checkbox"/>	 Home page		URL	http://www.math.tamu.edu/~maguiar/			

Texas A&M University - [Math. Department](#)

<input checked="" type="checkbox"/>	 Mathematics Genealogy Project	URL <input type="text"/>	http://genealogy.math.ndsu.nodak.edu/id.php?id=25171	<input type="button" value="X"/>
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TAMU Math. Dept.



I used Viewshare to generate and customize unique, dynamic views of data about faculty members, their research areas, PhD granting institutions, and the authority records in the Virtual International Authority File (VIAF).

Created by [violeta](#) on Jan. 23, 2013 and based on the [TAMU Math. Dept.](#) data set.

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Search

Research area

- 2 Algebra
- 6 Algebraic Geometry
- 1 Algebraic K-Theory
- 3 Applied Mathematics
- 6 Approximation Theory
- 3 Combinatorial Group Theory
- 1 Combinatorics

Name

- 1 Aguiar, Marcelo
- 1 Allen, G. Donald
- 1 Anshelevich, Michael
- 1 Bangerth, Wolfgang
- 1 Battle, Guy
- 1 Berkolaiko, Gregory
- 1 Boas, Harold

Research area

Algebra **Algebraic Geometry** Algebraic K-Theory Applied Mathematics Approximation Theory
 Combinatorial Group Theory Combinatorics Control Theory Differential Geometry Dynamical Systems Fluid Dynamics
Functional Analysis Functions of a Complex Variable Geometric Analysis Group Representations Integral Equations Math
 Education Mathematical Physics Non-Commutative Geometry Number Theory Numerical Analysis Operator
 Theory **Partial Differential Equations** Probability Theory Quantum Computation Several Complex Variables
 Solid Mechanics

[RESEARCH AREA LIST](#) • [PHD YEAR LIST](#) • [PHD GRANTING INSTITUTION MAP](#) • [TIMELINE](#) • [PHD GALLERY](#) • [RESEARCH AREA GALLERY](#) • [PIE CHART](#)

76

widgets

Add a Widget



Search x

List x

List x

Search

edit

Research area

2 Algebra

Name

1 Aquiar Marcelo

Select widget type



Search



List



Tag Cloud



Slider

499 1 - 2
171 2 - 3
39 3 - 4
83 4 - 5
26 5 - 6
3 6 - 7

Range



Logo



Text

Tag Cloud

Research area

Algebra Algebraic Geometry Combinatorial Group Theory Functional Analysis Functions of a Complex Variable Geometric Analysis Group Representations Integral Equations Math Education Mathematical Physics Non-Commutative Geometry Number Theory Numerical Analysis Operator Theory Partial Differential Equations Probability Theory Quantum Computation Several Complex Variables Solid Mechanics

widgets

Algebra

Aguiar, Marcelo ([link](#))

Bachelor granting insitution

Universidad de Uruguay

Department page

<http://www.math.tamu.edu/directory/formalpg.php?user=maguiar>

gender

male

Home page

<http://www.math.tamu.edu/~maguiar/>

image



Master granting institution

Mathematics Genealogy Project

<http://genealogy.math.ndsu.nodak.edu/id.php?id=25171>

Name

Aguiar, Marcelo

PhD date

Wed, Jan 1, 1997, 12:00 am

PhD granting institution

Cornell University

PhD location

42.4406, -76.4969

Research area

Algebra

VIAF

<http://viaf.org/viaf/54453604>

Research area list

1960

[Pearcy, Carl \(link\)](#)

Bachelor granting insitution

Department page

<http://www.math.tamu.edu/directory/formalpg.php?user=cpearcy>

gender

male

Home page

<http://www.math.tamu.edu/~cpearcy/>

image



Master granting institution

Mathematics Genealogy Project

<http://genealogy.math.ndsu.nodak.edu/id.php?id=7760>

Name

Pearcy, Carl

PhD date

Fri, Jan 1, 1960, 12:00 am

PhD granting institution

Rice University

PhD location

29.7631, -95.3631

Research area

Functional Analysis

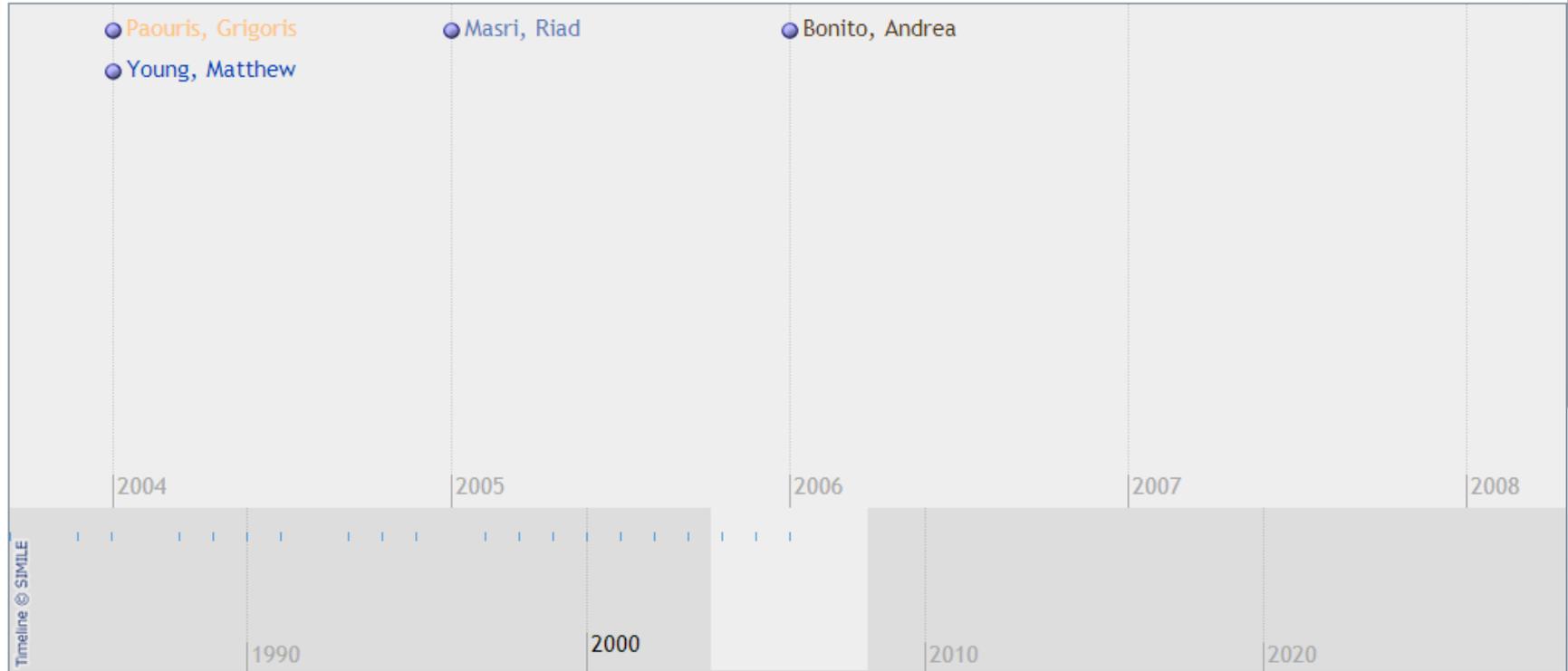
VIAF

<http://viaf.org/viaf/73917027>

PhD year list



PhD granting institution map



Timeline by PhD year

Cornell University



Aguiar, Marcelo



Geller, Sue



Pasciak, Joseph

Duke University



Battle, Guy



Landsberg, Joseph M.

Search

Select Field:

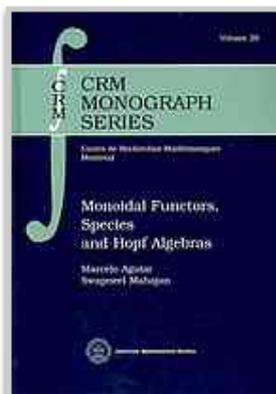
Personal Names

Select Index:

All VIAF

Search Terms:

Search



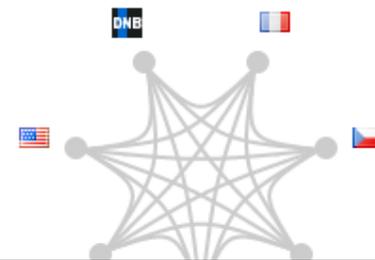
Aguiar, Marcelo, 1968-.... 

VIAF ID: 54453604 (Personal)

Permalink: <http://viaf.org/viaf/54453604>

Preferred Forms

-   100 1 _ [ta Aguiar, Marcelo td \(1968-.\)](#)
-   100 1 _ [ta Aguiar, Marcelo td 1968-](#)
-   200 _ | [ta Aguiar tb Marcelo tf 1968-....](#)
-   100 1 _ [ta Aguiar, Marcelo td 1968-](#)



link to the VIAF

Aguiar, Marcelo 1968-

Overview

Works: 10 works in 15 publications in 2 languages and 298 library holdings

Classifications: qa613.8, 512.55

Most widely held works by Marcelo Aguiar

Coxeter groups and Hopf algebras by Marcelo Aguiar (Book)

3 editions published in 2006 in English and held by 197 libraries worldwide

An important idea in the work of G.C. Rota is that certain combinatorial objects give rise to Hopf algebras that reflect the manner in which these objects compose and decompose. This text presents a geometric approach using Coxeter complexes and the projection maps of Tits for constructing and studying many of these objects.

Monoidal functors, species and Hopf algebras by Marcelo Aguiar (Book)

2 editions published in 2010 in English and held by 85 libraries worldwide

"This research monograph integrates ideas from category theory, algebra and combinatorics. It is organized in three parts. Part I belongs to the realm of category theory. It reviews some of the foundational work of Bénabou, Eilenberg, Kelly and Mac Lane on monoidal categories and of Joyal and Street on braided monoidal categories, and proceeds to study higher monoidal categories and higher monoidal functors. Special attention is devoted to the notion of a bilax monoidal functor which plays a central role in this work. Combinatorics and geometry are the theme of Part II. Joyal's species constitute a good framework for the study of algebraic structures associated to combinatorial objects. This part discusses the category of species focusing particularly on the Hopf monoids therein. The notion of a Hopf monoid in species parallels that of a Hopf algebra and reflects the manner in which combinatorial structures compose and decompose. Numerous examples of Hopf monoids are given in the text. These are constructed from combinatorial and geometric data and inspired by ideas of Rota and Tits' theory of Coxeter complexes. Part III is of an algebraic nature and shows how ideas in Parts I and II lead to a unified approach to Hopf algebras. The main step is the construction of Fock functors from species to graded vector spaces. These functors are bilax monoidal and thus translate Hopf monoids in species to graded Hopf algebras. This functorial construction of Hopf algebras encompasses both quantum groups and the Hopf algebras of recent prominence in the combinatorics literature. The monograph opens a vast new area of research. It is written with clarity and sufficient detail to make it accessible to advanced graduate students."--Publisher's description.

Alternative Names

Aguiar-Solari, Marcelo, 1968-
Solari, Marcelo Aguiar 1968-....

Languages

English (9)
Portuguese (6)

Result of search:



000	00000cz a2200000n 45 0
001	oca04552762
005	20001121070732.0
008	971208n acannaabn a aaa c
010	anr 97043402
040	aNIC beng cNIC dOCoLC
100	1 aAguiar, Marcelo, d1968-
400	1 aAguiar-Solari, Marcelo, d1968-
670	aInternal categories and quantum groups, c1997: bt.p. (Marcelo Aguiar; Thesis (Ph.D.)--Cornell Univ., Aug., 1997) p. iii (Marcelo Aguiar-Solari; b. 10/7/68 in Montevideo, Uruguay)
999	a192

Library of Congress Authority File

0000000121337380

[search](#) [more](#)



Examples: Prince; Princeton University; Ken Follett; Follett, Ken

User id: ISNI | [log in](#) | [logout](#)

[shortlist](#) [title data](#) [search history](#)

1

results [search \[or\]](#) (ISNI Number (ISN:)) 0000000121337380 | 1 hits

[labels](#) [pica+](#) [marc21](#)

Please help us improve this record

If you have any supplemental information about the identity listed here, please click in this box to go to the contribution form.

Thank you in advance!

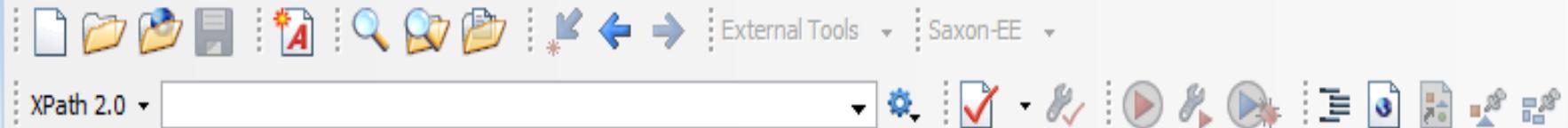


ISNI: 0000 0001 2133 7380
Name: Aguiar Solari, Marcelo
Aguiar-Solari, Marcelo
Aguiar, Marcelo
Solari, Marcelo Aguiar
Dates: 1968-..
Creation class: Language material
Text
Creation role: 070
author
Related names: Centre de recherches en mathématiques appliquées Montréal, Canada
Mahajan, Swapneel (1974-...)
Mahajan, Swapneel Arind (1974-)
Titles: Coxeter groups and Hopf algebras
Internal categories and quantum groups, c1997:
Monoidal functors, species and Hopf algebras
Sources: [VIAF](#) [BNF](#) [DNB](#) [LC](#) [NKC](#) [NUKAT](#) [SUDOC](#)
BOWKER

ISNI International Agency

justlinks.json [C:\My Documents\Linked Data\justlinks.json] - <oxygen/> XML Editor

File Edit Find Project Options Tools Document Window Help



30 12.xml x ExportFromOCLC.xml x ExportFromOCLCDC.xml x RobsTAESDC12132012.xml x Allrecords.xml x tnew.xml x

Project

Outline

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Just links in JSON

/rdf:RDF/rdf:Description/foaf:name

Source Options

XPath/Render XSL

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RDF record

Algebraic Geometry



Landsberg, Joseph M.



Lima-Filho, Paulo



Matusevich, Laura Felicia



Rojas, J. Maurice



Sottile, Frank



Stiller, Peter

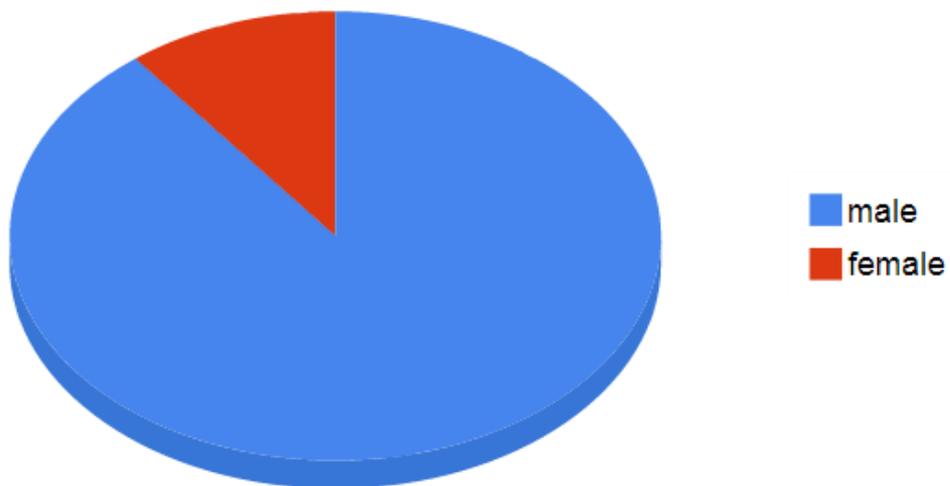
Research area gallery

CHART

View by :

gender

Items grouped by gender



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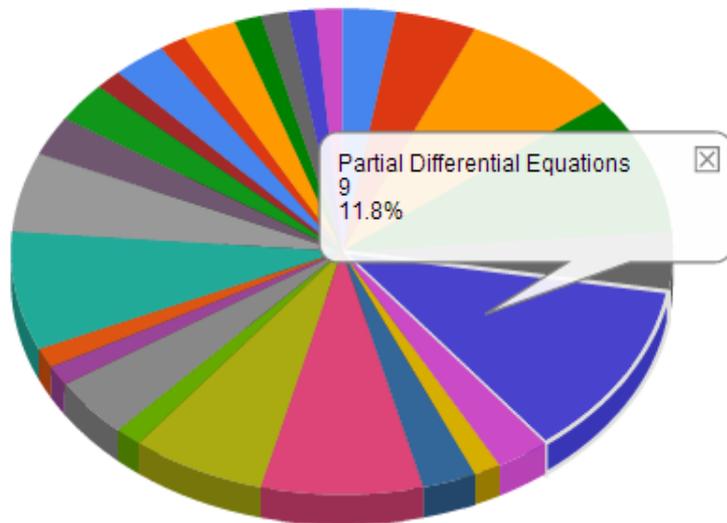
Pie chart - gender

CHART

View by :

Research_area ▼

Items grouped by Research_area



- Algebra
- Applied Mathematics
- Functional Analysis
- Numerical Analysis
- Mathematical Physics
- Partial Differential Equations
- Several Complex Variables
- Control Theory
- Fluid Dynamics
- Approximation Theory
- Operator Theory
- Algebraic K-Theory
- Combinatorial Group Theory
- Group Representations
- Integral Equations
- Algebraic Geometry
- Number Theory
- Probability Theory
- Geometric Analysis
- Functions of a Complex Variable
- Differential Geometry
- Quantum Computation
- Math Education
- Dynamical Systems
- Solid Mechanics
- Combinatorics
- Non-Commutative Geometry

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Pie chart - Research area

76

sorted by: [Research area](#); then by... • grouped as sorted

- RDF/XML
- Semantic wikitext
- Tab Separated Values
- Exhibit JSON
- Facet Selections
- Generated HTML of this view

Algebra

Aguiar, Marcelo ([link](#))

Bachelor granting insitution	Universidad de Uruguay
Department page	http://www.math.tamu.edu/directory/formalpg.php?user=maguiar
gender	male
Home page	http://www.math.tamu.edu/~maguiar/
image	
Master granting institution	
Mathematics Genealogy Project	http://genealogy.math.ndsu.nodak.edu/id.php?id=25171
Name	Aguiar, Marcelo
PhD date	Wed, Jan 1, 1997, 12:00 am
PhD granting institution	Cornell University

Export data in various formats

Operator Theory

versus

Partial Differential Equations

Thank you

Violeta Ilik
vilik@library.tamu.edu