



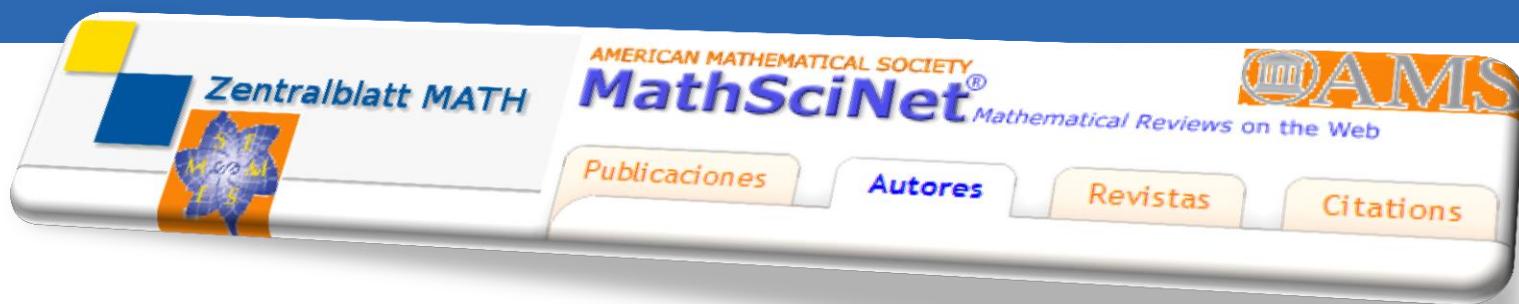
UNIVERSIDAD
COMPLUTENSE
MADRID

Competencias en Recursos de Información Científica: **curso básico**

Curso 2019-2020

Facultad de Ciencias Matemáticas
Biblioteca

Bases de datos específicas de matemáticas



Contenidos del tema

- **Mathscinet**



ACCESO
RED UCM

- **Zentralblatt Math**



ACCESO
RED UCM

Contenidos del tema

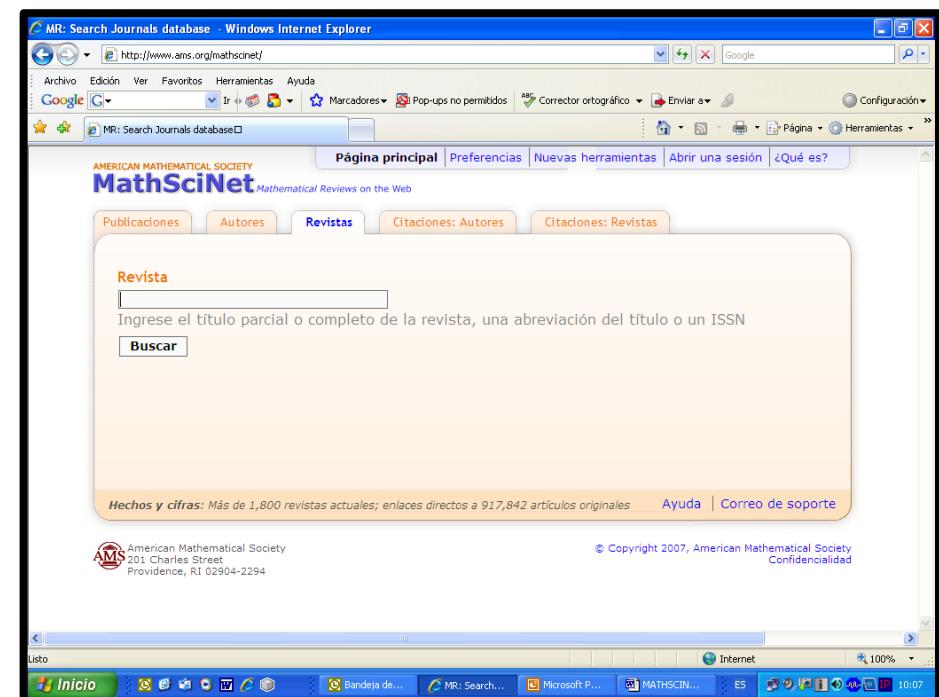
- **Mathscinet**
 - Introducción
 - Preferencias
 - Herramientas
 - Tipos de consultas
 - Búsquedas
- **Zentralblatt Math**



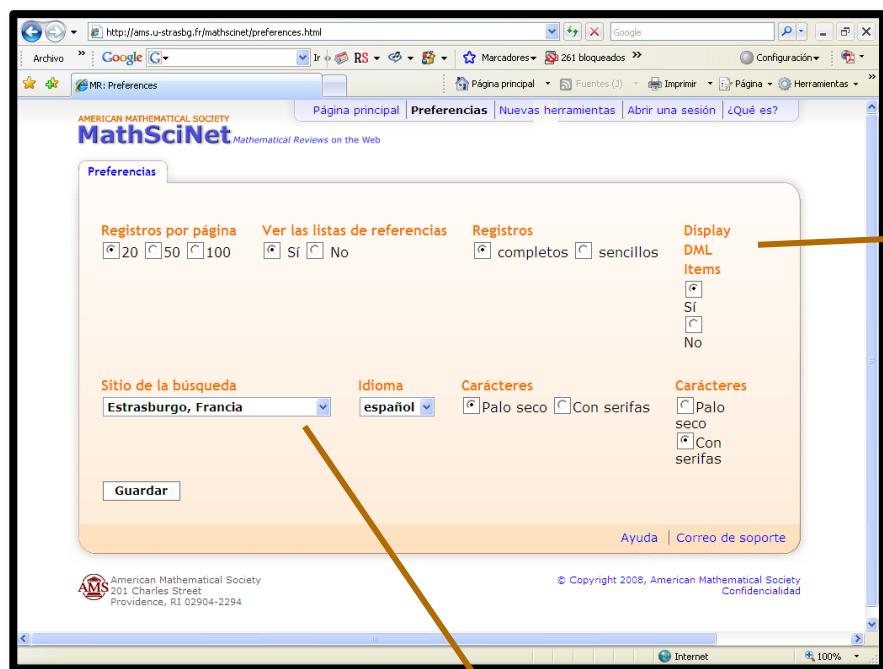
Introducción

- Base de datos de **reseñas, resúmenes e información bibliográfica** de la literatura matemática más importante. Contiene 3'7 millones de artículos clasificado y 2 millones de enlaces directos a artículos originales

- **Cobertura:** lo publicado **desde 1940 (principios del XIX con los proyectos de digitalización)** en la publicación *Mathematical Reviews* (MR). Más de 1800 revistas indexadas.



Preferencias



Sitio de la búsqueda:

- Elegir el lugar más cercano

Mathscinet

DML:

- Se incluyen artículos digitalizados (desde 1826) por proyectos incluidos en la Biblioteca digital mundial de matemáticas (artículos anteriores a 1940 y artículos posteriores no incluidos en MR). También tesis antiguas.

Algunas peculiaridades

Búsquedas en MSC (la clasificación específica de los matemáticos)

This screenshot shows the 'Búsquedas en MSC' (MSC Searches) section of the MathSciNet interface. It features a search form for selecting a Mathematics Subject Classification (MSC) code, with options to search by name or classification number. Below the form is a link to 'Revistas actuales' (Current Journals).

Distancia entre colaboradores
(aplicación basada en el número Erdős que mide la relación entre colaboradores)

This screenshot shows the 'Distancia entre colaboradores' (Collaboration Distance) section of the MathSciNet interface. It includes fields for entering author names and a checkbox to filter results for Erdős. Below the form is a link to 'Publicaciones actuales' (Current Publications).

Publicaciones actuales.
Sirven de alertas

This screenshot shows the 'Publicaciones actuales' (Current Publications) section of the MathSciNet interface. It includes filters for publication type (Todos, Libros, Revistas, Actas de congresos), date range (este mes), classification (All Classifications), and treatment (Indexados, Con recensiones). Below the form is a link to 'Revistas actuales' (Current Journals).

Tipos de consultas

The screenshot shows the MathSciNet search interface. At the top, there is a navigation bar with links to 'Página principal', 'Preferencias', 'Nuevas herramientas', 'Abrir una sesión', and '¿Qué es?'. Below the navigation bar, there is a search form titled 'Publicaciones' with fields for 'Autor', 'Título', 'Serie', and 'Dondequiero'. There are also buttons for 'Buscar' and 'Borrar'. To the right of the search form, there is a section titled 'Cuándo?' with checkboxes for 'Base de datos entera', 'Año' (with a dropdown menu showing '1990'), and 'Años:' (with two input fields). Next to it is a section titled 'Tipo de documento' with radio buttons for 'Todos' (selected), 'Libros', 'Revistas', and 'Actas de congresos'. At the bottom of the search form, there is a message stating 'Hechos y cifras: 2,304,423 registros totales'. On the right side of the page, there are links for 'Ayuda' and 'Correo de soporte'. At the very bottom, there is a footer with the text 'American Mathematical Society', '© Copyright 2008 American Mathematical Society', 'Confidencialidad', and a link to 'Done'.

Publicaciones. Busca en la base de datos bibliográfica y nos da los datos, comentarios y (si están disponibles) enlaces a los artículos o libros a texto completo.

Tipos de consultas



The screenshot shows the MathSciNet homepage with a search bar for authors. The search term 'Hilbert, D*' has been entered, and the 'Buscar' button is visible. Below the search bar, a message states 'Hechos y cifras: 498,131 autores indexados'. The page includes navigation links for 'Publicaciones', 'Autores' (which is selected), 'Revistas', 'Citaciones: Autores', and 'Citaciones: Revistas'. The footer contains the AMS logo and address.

Autores. Busca en la base de datos de autores. Nos ofrece una página de autor con datos sobre sus publicaciones, colaboraciones y citas, y enlaces adicionales como al [Mathematics Genealogy Project](#), o a [MacTutor History of Mathematics archive](#)

Tipos de consultas

Página de autor

The screenshot shows the MathSciNet homepage with a search bar at the top. Below it, a search result for "Bombal, Fernando" is displayed. The profile summary includes:

- MR Author ID: 39045
- Earliest Indexed Publication: 1969
- Total Publications: 72
- Total Author/Related Publications: 74
- Total Citations: 93

Links on the right side include:

- View Publications
- View Author/Related Publications
- Refine Search
- Co-Authors
- Collaboration Distance
- Mathematics Genealogy Project
- Citations

Below the profile summary, there is a section titled "Also published as: Bombal, F....".

Co-authors (by number of collaborations)

- Cembranos, Pilar
- Emmanuele, Giovanni
- Fernández Unzueta, Maite
- Fierro Bello, Carmen
- González Llavona, J. L.
- Gutiérrez del Alamo, Joaquín M.
- Hernando, Beatriz
- Jiménez Guerra, Pedro
- Mendoza, José
- Pérez-García, David
- Porras, B.
- Rodríguez-Marín, Luis
- Rodríguez-Salinas Palero, Baltasar
- Vera, Gabriel
- Villanueva Díez, Ignacio

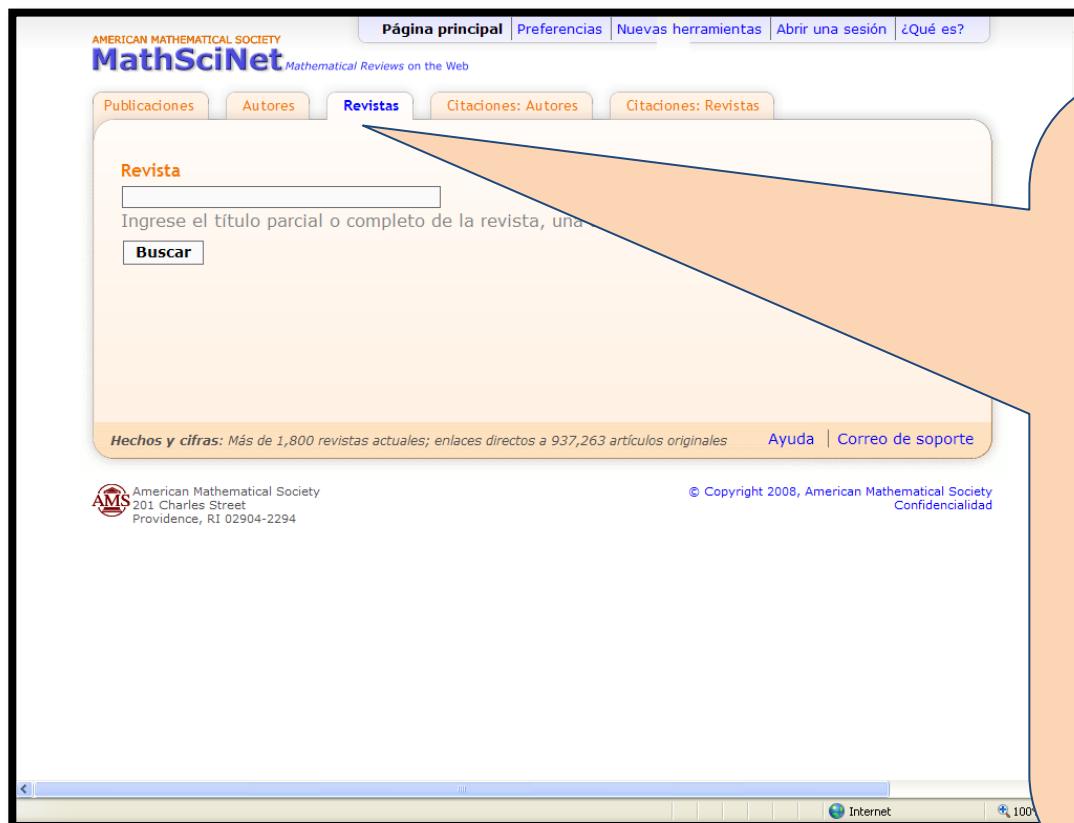
Publications (by number in area)

- Abstract harmonic analysis
- Functional analysis
- General topology
- History and biography
- Measure and integration
- Operator theory
- Order, lattices, ordered algebraic structures

Publications (by number of citations)

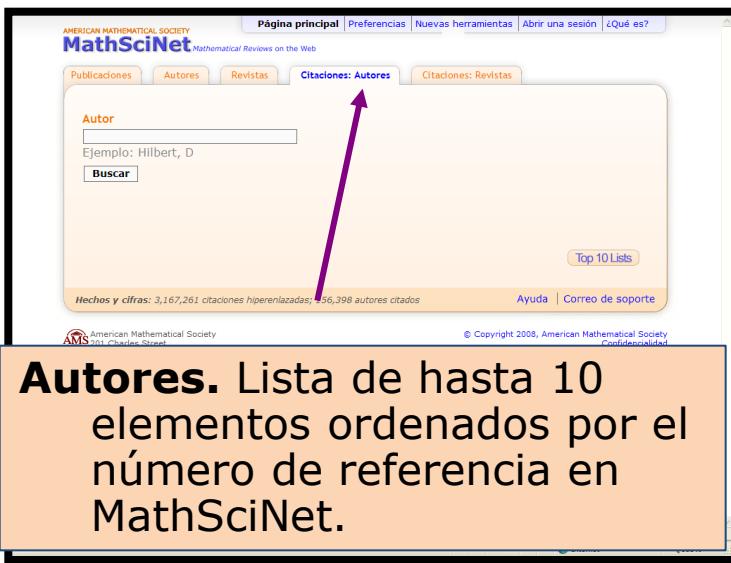
- Functional analysis
- General topology
- Operator theory

Tipos de consultas



Revistas. Busca en la base de datos de revistas y nos devuelve una lista de revistas con enlaces a la información bibliográfica y al sitio web del editor. Se puede consultar por título parcial o completo, por el título abreviado, o por el ISSN

Citaciones



The screenshot shows the MathSciNet homepage with the 'Citaciones: Autores' tab selected. A search bar contains the name 'Hilbert, D'. Below it, a message states 'Hechos y cifras: 3,167,261 citas hiperenlazadas; 356,398 autores citados'. A purple arrow points from the text 'Autores. Lista de hasta 10 elementos ordenados por el número de referencia en MathSciNet.' to the search bar.

Autores. Lista de hasta 10 elementos ordenados por el número de referencia en MathSciNet.



The screenshot shows the MathSciNet homepage with the 'Citaciones: Revistas' tab selected. A search bar contains the title 'Hilbert, D'. Below it, a message states 'Hechos y cifras: 3,167,261 citas hiperenlazadas; 2,492 revistas citadas'. A purple arrow points from the text 'Revistas. Nos da información sobre las citas de las revistas sobre la base de las listas de referencia de MathSciNet' to the search bar.

Revistas. Nos da información sobre las citas de las revistas sobre la base de las listas de referencia de MathSciNet

El botón Top 10. Muestra tres pestañas (Top Books, Top Journal Articles, y Top Journals). En cada caso, un menú desplegable permite seleccionar un año a partir del año 2000. Los 10 primeros libros y los primeros 10 artículos de revistas citados en el año seleccionado enumeran según el número de citas. Las 10 principales revistas se enumeran en función de su **Mathematical Citation Quotient (MCQ)**= Cociente de Citas de Matemáticas (PEM) para el año elegido.

Búsquedas

Acotar la búsqueda

AMERICAN MATHEMATICAL SOCIETY
MathSciNet
Mathematical Reviews
ISSN 2167-5163

Matches: 107 Show first 100 results Batch Download: [Reviews \(HTML\)](#) Retrieve Marked | Retrieve First 50 | Mark All | Unmark All Publications results for "Items authored by Hilbert, David" as up

Sort by: Newest ▾

Search within results

Item Type
 Reviewed (53)
 DML (49)
 Indexed (4)
 Pending (1)

Institutions
 Only city listed (1)

Authors
 Hilbert, David* (107) ▾
 Bernays, Paul Isaak (8)

Courant, Richard (7)
 Cohn-Vossen, Stefan (5)
 Ackermann, Wilhelm (4)

Primary Classification
 Other (49) ▾
 History and biography (23)
 Geometry (9)

[Portapapeles](#) | Página principal | Preferencias | Nuevas herramientas | Help | Support Mail | Terms of Use | Blog

Universidad Complutense Madrid



Nº de items encontrados

- **MR3551948** [Pending] Hilbert, David David Hilbert's lectures on the foundations of arithmetic and logic, 1917–1933. Edited by William Ewald, Wilfried Sieg and Michael Hallett, in collaboration with Ulrich Majer and Dirk Schlimm. Springer, Heidelberg; Springer-Verlag, Berlin, 2013. xxv+1062 pp. ISBN: 978-3-540-69444-1; 978-3-540-20578-4 03-03 (01A60 01A75 03E20 03F03) [Review PDF](#) | [Clipboard](#) | [Series](#) | [Book](#)
- **MR3027390** [Reviewed] Hilbert, David; Bernays, Paul Grundlagen der Mathematik. I/Foundations of mathematics. I. Part A. Prefaces and §§1–2. Edited and with a preface by Dov Gabbay, Michael Gabbay, Jörg Siekmann and Claus-Peter Wirth. Commented translation by Claus-Peter Wirth of the second German edition of 1968, including the annotation and translation of all deleted parts of the first German edition of 1934. With a chapter "Hilbert's proof theory" by Wilfried Sieg [MR2668182]. Dual German–English text. College Publications, London, 2011. lxiii+170 pp. ISBN: 978-1-84890-033-2 03-03 (01A75 03B30 03Fxx) [Review PDF](#) | [Clipboard](#) | [Series](#) | [Book](#) | 1 Citation
- **MR1931637** [Reviewed] Hilbert, D.; Bernays, P. Fondements des mathématiques. 2. (French) [Foundations of mathematics. 2] Translated from the second (1970) German edition by François Gaillard, Eugène Guillaume and Marcel Guillaume. L'Harmattan, Paris, 2001. 624 pp. ISBN: 2-7475-1519-2 01A75 (03-03) [Review PDF](#) | [Clipboard](#) | [Series](#) | [Book](#) | 1 Citation
- **MR1931636** [Reviewed] Hilbert, D.; Bernays, P. Fondements des mathématiques. 1. (French) [Foundations of mathematics. 1] Translated from the second (1968) German edition by François Gaillard and Marcel Guillaume. L'Harmattan, Paris, 2001. 607 pp. ISBN: 2-7475-1518-4 01A75 (03-03) [Review PDF](#) | [Clipboard](#) | [Series](#) | [Book](#)
- **MR1779412** [Indexed] Hilbert, David Mathematical problems. Reprinted from Bull. Amer. Math. Soc. **8** (1902), 437–479. *Bull. Amer. Math. Soc. (N.S.)* **37** (2000), no. 4, 407–436. 01A75 [Review PDF](#) | [Clipboard](#) | [Journal](#) | [Article](#) | 46 Citations
- **MR1748440** [Indexed] Hilbert, David Mathematical problems. Lecture delivered before the International Congress of Mathematicians at Paris in 1900. Translated from the German by Mary Winston Neson. *Math. Today (Southend-on-Sea)* **36** (2000), no. 1, 14–17. 01A75 (01A05) [Review PDF](#) | [Clipboard](#) | [Journal](#) | [Article](#) | 9 Citations

Clave de búsqueda

Cada uno de
los items
encontrados

Búsquedas

Nº de referencia en MR

Autor

Título

Citaciones

MR2197276 (2006h:83005)
Sauer, Tilman(1-CAIT-EPP)

Einstein equations and Hilbert action: what is missing on page 8 of the proofs for Hilbert's first communication on the foundations of physics? (English summary)
Arch. Hist. Exact Sci. 59 (2005), no. 6, 577–590.
83-03 (01A60)
PDF | Doc Del | Clipboard | Journal | Article | Make Link

Citations
From References: 1
From Reviews: 0

Enlaces hipertextuales

In this paper Sauer discusses a very interesting fragment from the development of the general theory of relativity, namely the competition Hilbert and Einstein were locked in close to the publication of the final set of generally covariant field equations by the latter. Sauer aims to give a "succinct and balanced assessment of the respective contributions of both authors in the final establishment of the general theory of relativity". He achieves this aim in what is an extremely well-informed, very readable paper.

At the core of the discussion is an analysis of a set of Hilbert's proofs of his paper documenting his work on general relativity. The problem is that some of the pages are missing. The question then is: might Hilbert have gotten to the Einstein tensor before Einstein? Sauer answers this by performing what can best be described as a piece of "reconstructive surgery" on the proofs, filling in the missing gaps on the basis of the rest of the proofs. He concludes from this that it is highly unlikely that the missing pages contained some version of the Einstein tensor (with its trace term). More likely, argues Sauer (on the basis of the coherence and consistency of the text as a whole), is that Hilbert's missing piece contained a specification of the Lagrangian of Hilbert's action principle written as a sum of gravitational and matter parts, along with a further specification of the gravitational part as the Riemann curvature scalar (also giving the Ricci tensor).

Reviewed by Dean Rickles

References

1. Mehra, J. *Einstein, Hilbert, and The Theory of Gravitation*. Dordrecht, Boston: D. Reidel, 1974.
2. Earman, J., Glymour, C. "Einstein and Hilbert. Two Months in the History of General Relativity." *Archive for History of Exact Sciences* 19 (1978), 291--308. [MR0507744 \(80d:01017\)](#)
3. Pais, A. 'Subtle is the Lord...The Science and the Life of Albert Einstein.' Oxford and New York: Clarendon Press and Oxford University Press, 1982. [MR0690419 \(84j:01072\)](#)
4. Norton, J. "How Einstein Found His Field Equations: 1912--1915" *Historical Studies in the Physical Sciences* 14 (1984) 253–316. Reprinted in: Howard, D. and Stachel, J., (eds.) *Einstein and the History of General Relativity*. Boston: Birkhäuser, 1989, pp. 101–159. [MR1200720 \(94i:83001\)](#)

Resumen o revisión

Revisor

Bibliografía

Contenidos del tema

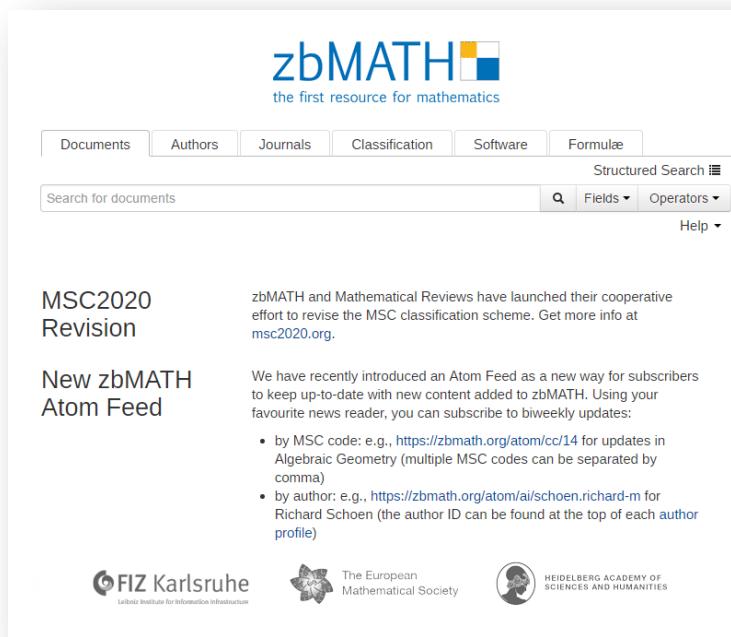
- **Mathscinet**
- **Zentralblatt Math**
 - **Introducción**
 - **Tipos de consulta**
 - **Búsquedas**



ACCESO
RED UCM

Introducción

ZentralblattMath



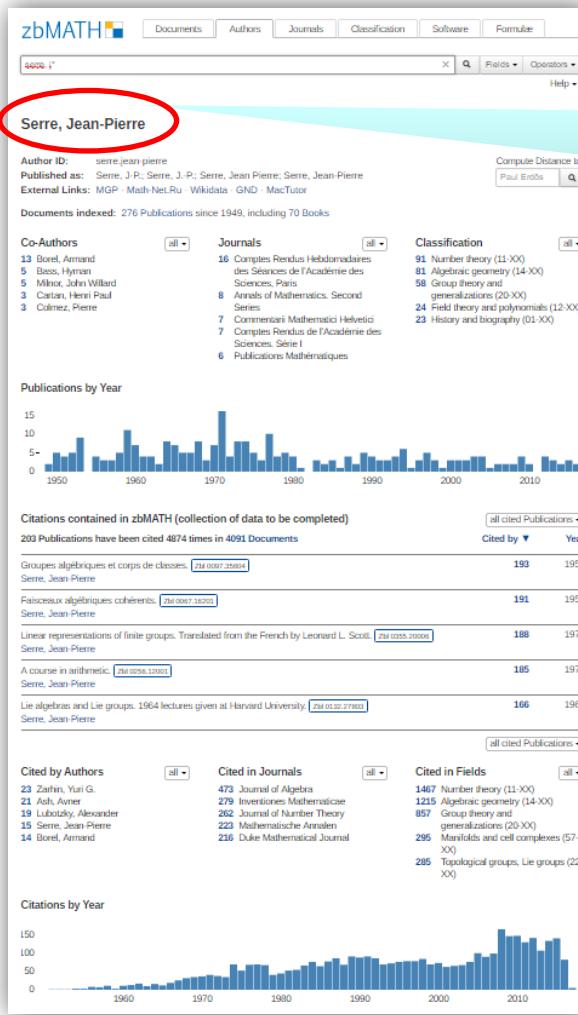
The screenshot shows the zbMATH homepage. At the top, there is a navigation bar with links for 'Documents', 'Authors', 'Journals', 'Classification', 'Software', and 'Formulæ'. Below the navigation bar is a search bar with the placeholder 'Search for documents' and dropdown menus for 'Fields' and 'Operators'. To the right of the search bar is a 'Structured Search' button. On the left side of the main content area, there are two sections: 'MSC2020 Revision' and 'New zbMATH Atom Feed'. The 'MSC2020 Revision' section contains a link to 'msc2020.org'. The 'New zbMATH Atom Feed' section describes how to subscribe to updates via an Atom feed, providing examples for both MSC code and author ID. At the bottom of the page, there are logos for 'FIZ Karlsruhe' (Leibniz Institute for Information Infrastructure), 'The European Mathematical Society', and 'HEIDELBERG ACADEMY OF SCIENCES AND HUMANITIES'.

<https://zbmath.org/>

- Base de datos que recoge **unos 4 millones de entradas** procedentes de unas 3000 títulos de revistas y series monográficas (congresos, colecciones). 2'1 millones de enlaces. Todos los registros están clasificados conforme a la MSC.
- **Cobertura:** desde 1935 (desde 1868 con la incorporación de digitalizaciones).
- **Temática:** se extiende a todas las áreas de la Matemática Pura y Aplicada y a la Historia de las Matemáticas.
- **Actualización:** diaria

- La producen la European Mathematical Society (EMS), el Fachinformationszentrum (Centro para la Información Científica) (FIZ), Karlsruhe y la Academia de Ciencias de Heidelberg.
- Enlaza al texto completo de los artículos

Tipos de consulta



ZentralblattMath

Búsqueda por Autor. Recupera una página con gran información sobre el autor.

Coautores, Revistas en que ha publicado, Clasificación temática

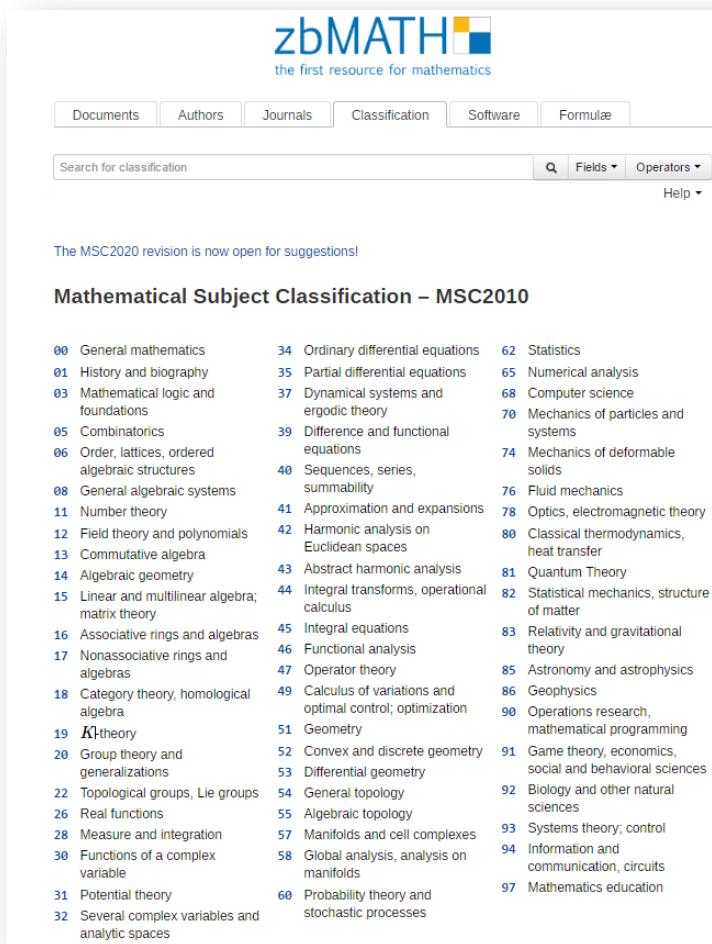
Publicaciones por años

Ranking de publicaciones más citadas

Ranking citas por autores, revistas y campos de trabajo

Citas por años

Tipos de consulta



The screenshot shows the zbMATH search interface. At the top, there is a navigation bar with links for Documents, Authors, Journals, Classification, Software, and Formulae. Below the navigation bar is a search bar labeled "Search for classification" with dropdown menus for Fields and Operators. A message below the search bar says "The MSC2020 revision is now open for suggestions!". The main content area is titled "Mathematical Subject Classification – MSC2010". It displays a hierarchical tree of mathematical subjects, numbered from 00 to 97. Some categories have sub-categories listed under them.

Category	Sub-Categories
00 General mathematics	
01 History and biography	
03 Mathematical logic and foundations	
05 Combinatorics	
06 Order, lattices, ordered algebraic structures	
08 General algebraic systems	
11 Number theory	
12 Field theory and polynomials	
13 Commutative algebra	
14 Algebraic geometry	
15 Linear and multilinear algebra; matrix theory	
16 Associative rings and algebras	
17 Nonassociative rings and algebras	
18 Category theory, homological algebra	
19 K-theory	
20 Group theory and generalizations	
22 Topological groups, Lie groups	
26 Real functions	
28 Measure and integration	
30 Functions of a complex variable	
31 Potential theory	
32 Several complex variables and analytic spaces	
34 Ordinary differential equations	
35 Partial differential equations	
37 Dynamical systems and ergodic theory	
39 Difference and functional equations	
40 Sequences, series, summability	
41 Approximation and expansions	
42 Harmonic analysis on Euclidean spaces	
43 Abstract harmonic analysis	
44 Integral transforms, operational calculus	
45 Integral equations	
46 Functional analysis	
47 Operator theory	
49 Calculus of variations and optimal control; optimization	
51 Geometry	
52 Convex and discrete geometry	
53 Differential geometry	
54 General topology	
55 Algebraic topology	
57 Manifolds and cell complexes	
58 Global analysis, analysis on manifolds	
60 Probability theory and stochastic processes	
62 Statistics	
65 Numerical analysis	
68 Computer science	
70 Mechanics of particles and systems	
74 Mechanics of deformable solids	
76 Fluid mechanics	
78 Optics, electromagnetic theory	
80 Classical thermodynamics, heat transfer	
81 Quantum Theory	
82 Statistical mechanics, structure of matter	
83 Relativity and gravitational theory	
85 Astronomy and astrophysics	
86 Geophysics	
90 Operations research, mathematical programming	
91 Game theory, economics, social and behavioral sciences	
92 Biology and other natural sciences	
93 Systems theory; control	
94 Information and communication, circuits	
97 Mathematics education	

ZentralblattMath

Búsqueda por MSC. Es el tipo de búsqueda más pertinente porque busca por la clasificación que cada autor asigna a cada artículo.

Permite acotar por comandos la búsqueda inicial

Acotaciones

ZentralblattMath

Aplicables en cualquier tipo de consulta. Dirigida a: documentos, autores, revistas o clasificación.

Puede delimitarse por:

- Campos y/o
- Operadores

The screenshot shows the zbMATH search interface. At the top, there are tabs for Documents, Authors, Journals, Classification, Software, and Formulae. Below the tabs is a search bar labeled "Search for documents". To the right of the search bar are buttons for "Structured Search" and "Operators". A red arrow points from the text "Campos y/o" to the "Operators" button. Another red arrow points from the text "Operadores" to the "Operators" dropdown menu. The dropdown menu is titled "Operators" and contains the following entries:

any: anywhere (default)	a & b logical and (default)
au: author, editor	a b logical or
ti: title	!ab logical not
so: source	abc* right wildcard
py: publication year	"ab c" phrase
pu: publisher	(ab c) parentheses
cc: MSC code	
rv: reviewer	
an: internal identifier	
la: language	
sw: software	

MSC2020
Revision

New zbMATH
Atom Feed

zbMATH and Mathematical Reviews
effort to revise the MSC classification
msc2020.org.

We have recently introduced an Atom feed
to keep up-to-date with new content.
If you like to receive news from zbMATH in
your favourite news reader, you can subscribe
to our Atom feed.

- by MSC code: e.g., <https://zbmath.org/atom/msc/14> for Algebraic Geometry (multiple MSC codes separated by comma)
- by author: e.g., <https://zbmath.org/atom/ai/schoen.richard-m> for Richard Schoen (the author ID can be found at the top of each author profile)

ZentralblattMath

Acotaciones

zbMATH

- [Documents](#)
- [Authors](#)
- [Journals](#)
- [Classification](#)
- [Software](#)
- [Formulæ](#)

algebra

Structured Search

Fields Operators

Help

mark all display marked items Page 1 of 2186 first prev • • • • • next last

Found 218566 documents (Results 1–100)

Hashimoto, Mitsuysu
Higher-dimensional absolute versions of symmetric, Frobenius, and quasi-Frobenius algebras. (English) [Zbl 06686884]
Math. J. Okayama Univ. 59, 131–140 (2017).
MSC: 16E65 14A15
[PDF](#) [BibTeX](#) [XML](#)

Helmer, Leonid
Reflexivity of non-commutative Hardy algebras. (English) [Zbl 06686608]
J. Funct. Anal. 272, No. 7, 2752–2794 (2017).
MSC: 46 47
[PDF](#) [BibTeX](#) [XML](#) Full Text: [DOI](#)

Cameron, Jan; Fang, Junsheng; Mukherjee, Kunal
Mixing and weakly mixing abelian subalgebras of type II_1 -factors. (English) [Zbl 06686606]
J. Funct. Anal. 272, No. 7, 2697–2725 (2017).
MSC: 46L10
[PDF](#) [BibTeX](#) [XML](#) Full Text: [DOI](#)

Rindler, H.
Book review of: Jörg Liesen and Volker Mehrmann, Lineare Algebra. Ein Lehrbuch über die Theorie mit Blick auf die Praxis. 2nd ed. (English) [Zbl 06686604]
Monatsh. Math. 182, No. 2, 496–497 (2017).
MSC: 00A17 15-01
[PDF](#) [BibTeX](#) [XML](#) Full Text: [DOI](#)

Carqueville, N.



Filter recent results by...
 Authors
 Jun, Young Bae (189)
 Chajda, Ivan (171)
 Park, Choonkil (160)
 Shum, Kar-Ping (118)
 Eshaghi Gordji, Madjid (108)

Journals
 J. Algebra (6821)
 Linear Algebra Appl. (6622)
 Commun. Algebra (4800)
 J. Pure Appl. Algebra (2922)
 J. Algebra Appl. (1361)

Classification
 16-XX (14754)
 20-XX (13775)
 17-XX (11805)
 46-XX (10306)
 15-XX (9870)

Publication Year
 2017 (686)
 2016 (5779)
 2015 (6905)
 2014 (7083)
 2013 (7401)

Filtrando la búsqueda por:

- **Autores**
- **Revistas**
- **Clasificación**
- **Año de publicación**

Búsquedas

ZentralblattMath

Referencia Zbl

The screenshot shows a search result for the query 'ar:1089.60029'. It includes fields for 'Query', 'Display', and 'Format'. Below the search bar, it shows the article details: 'Zbl 1089.60029' by 'Bañuelos, Rodrigo; Kulczycki, Tadeusz'. The summary discusses a connection between the semigroup of the Cauchy process killed upon exiting a domain and a mixed boundary value problem for the Laplacian in one dimension higher known as the mixed Steklov problem. It also mentions a variational characterization of eigenvalues and a Poincaré inequality.

Autores

Título

Datos de la revista

Resumen

Notaciones de la MSC

Palabras clave

Enlaces hipertextuales

Formatos

Ada Lovelace: el primer programador de la historia



¡MUCHAS GRACIAS!