Track Down Top Lit with MathSciNet

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Abstract

MathSciNet is a valuable tool to save time for the Math Graduate Student. MathSciNet is both an index of Mathematics literature as well as a collection of reviews of the literature. Use MathSciNet to save yourself time in searching for research, finding supplemental learning resources, and learning new topics.

Efficiency

MathSciNet saves the researcher time because almost every piece of literature is given an objective review as to its place in Mathematics. Many pieces will let you know when an article or book is not a significant contribution or provides inconclusive results. And great reviews are highlighted to call attention to groundbreaking works.

Length of reviews

The founder of MathSciNet, Otto Neugebauer, asserted that a review of a poor work should be long and detailed enough so as to save the readers' time from having to go read the poor work. By contrast, a review of a great piece should be so brief as to simply make someone want to immediately go read the article.

"This elementary problem occupies the whole of the lengthy paper under review. It is pursued with an unexpected maladroitness and many devious and useless complications." G. R. Allcock on "les espaces complexes et les quarternions en theorie des leptons" by Tzou.

Diversity of Sources

MR0154641

Having multiple types sources to base your research on makes your arguments stronger.

Books

Books from major Mathematical publishers are reviewed by MathSciNet reviewers as well. Books provide broad and comprehensive overviews on a topic about which much is known. Search for a well-reviewed book on your topic, or on the major subject (if your topic is specific) to learn the ins and outs before diving into the specifics.

Journal Articles

Journal articles generally present the current research on a topic. Follow citations to see the direction that the research takes. And read reviews to make sure it is quality work.

Case Studies

Case studies, which are also published in journals, present how something has been done to show you how you might do it. Think "Teaching the Taylor Expansion to Undergraduates". Or "Proving MacLaren's Theory Algebraically". Reading the reviews of case studies in MathSciNet can help you determine if they're worth your time.

Elements of a MathSciNet Review

MR# is the record number of the review. You'll also find it in the URL. It is the permanent identifier of this review.

13H10 is the primary

Math Subject

Classification (MSC)

Code of this article.

(13A30 is secondary)

13-Commutative

Algebra

13H – Local rings

and semilocal rings

13H10 Special types

MSC is revised every

10 years to account

for new areas of

research

MR1695295 (2000e:13034) Reviewed Morey, Susan(1-STSU)

Stability of associated primes and equality of ordinary and symbolic powers of ideals.

Comm. Algebra 27 (1999), no. 7, 3221–3231.

I be an ideal in a local Noetherian domain R. Twenty

13H10 (13A30)
Review PDF | Clipboard | Journal | Article | Make Link

Metadata is linked for discovery of related works.

wed that as n

Citations

From References: 5

From Reviews: 0

ws large, the set $\operatorname{Ass}(R/I^n)$ of prime divisors of I eventually stabilizes. The very difficult questions when and to what set remain largely untouched. This paper first treats the special case when R is renstein with infinite residue field and I is a strongly Cohen-Macaulay perfect ideal generated by a d quence. For this case, it identifies the stable value of $\operatorname{Ass}(R/I^n)$ as comprising those primes $P \supseteq I$ that the minimal number of generators of I_P equals height P, and also gives an upper bound on en stabilization occurs. The paper then goes on to identify two circumstances in which for all n, $\operatorname{Ass}(I^n)$ consists of just the primes minimal over I.

Reviewed by Stephen McAdam

Review text summaries the work to help readers quickly judge whether or not the work is relevant to their needs or area of research.

Many times the reviewers also make comments on quality or other criteria that may be helpful.

Scholarship is a Conversation

Catch up on the past conversation, and see where it's heading: Explore Citations from References and Reviews to discover how other scholars have used and discussed a piece of literature

Keller, Thomas Michael

Earliest Indexed Publication: 1994

MR Author ID:

Total Publications

Total Citations:

Publications (by number in area)

Group theory and generalizations



Learn what everyone is talking about: Sort any search by Citations to discover the top-cited literature in the field of your thesis or research

Use this button to

find the full text of an

article when it's not

available in

MathSciNet

Listen in on the important conversations: Use author profiles to learn more about what your faculty advisors, mentors, or future colleagues are

working on.

Share Edit Author Profile

Co-authors (by number of collaborations)

Publications (by number of citations)

Group theory and generalizations

Tims, Geoffrey T. Yang, Yong³

MR3575684 Reviewed Kurzyk, Dariusz(PL-PASG-TC); Glos, Adam(PL-PASG-TA) Quantum inferring acausal structures and the Monty Hall problem. (English summary) Quantum Inf. Process. 15 (2016), no. 12, 4927–4937. 81P45 Rev. W PDF | Clipboard | Journal | Article | Make Link

Review all the different topics of conversation: Click on any article's MSC code (##X##) to view articles with the same primary Math Subject Classification Code.

Nourish your curiosity: Research is Inquiry

You're a grad student: Welcome to research!

You should have learned by now that not all questions have been answered. And that many questions have multiple valid answers.

Look beyond your area of Mathematics for conversations and clues.

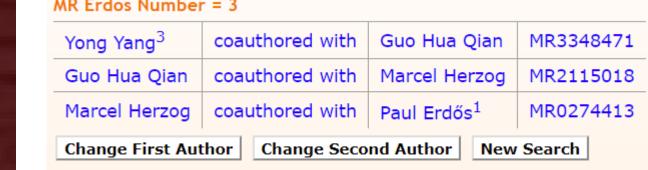
So, before you complete your research or literature review, go back and once more do some broad keyword searches. Ignore the MSC (which would pigeonhole you into one discipline), ignore citations and journal titles, and just see the breadth of the conversation. Look outside your discipline. Even though you may have done a broad search like this in the beginning to get background information, your new detailed knowledge in your topic area from all the in-depth research may help you draw new connections and new conclusions.

A real review

"It is hard to imagine in a single paper such an accumulation of garbled English, unfinished sentences, undefined notions and notations, and mathematical nonsense." Dieudonne on "On decomposition of certain formal groups." by Hsu MR0429922

Just a little fun

You've heard of "Six Degrees of Kevin Bacon", but do you know your professor's Erdös Number? That's how many degrees of separation someone is from the famously collaborative mathematician Paul Erdös.



Dr. Yang's Erdös number is 3.

You can also search for collaboration distance between any two mathematicians. What will your Erdös number be (co-author a paper and find out!)?

Sources

Jackson, A. (1997). Chinese acrobatics, an old-time brewery, and the "Much needed gap": The life of mathematical reviews. *Notices of the AMS, 44*(3), 330-337. Retrieved from http://www.ams.org/notices/199703/comm-mr.pdf
American Mathematical Society. (2016). Librarians' resources. Retrieved from https://mathscinet.ams.org/mathscinet/help/librarians.html

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