

Want to learn about X's work on Y but need a good overview to start with?

Suppose you are an ambitious graduate student and want to work up to be able to read current research by X on Y. (Say, Perelman on the Poincaré Conjecture)

There's no substitute for a good recommendation from someone who knows the field. If a result is famous, check Wikipedia. Browsing the shelves in the library is another approach.

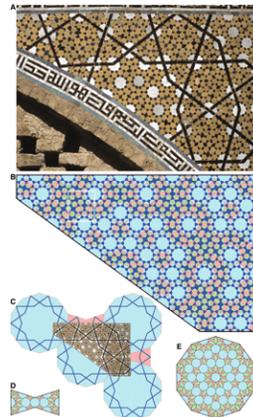
But searching techniques give you other options and other perspectives.

Start by looking up X in MathSciNet from the "Indexes and Databases" page of the LSU libraries at www.lib.lsu.edu, and with Zentralblatt Math at <http://www.zentralblatt-math.org/zmath/en/> (Perelman's papers on arXiv are listed in Zentralblatt but not MathSciNet)

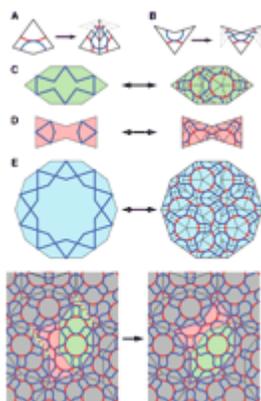
Search by author X, or by keywords about Y. But if a search starts with a keyword, use some results of the initial search to find subject headings. Then search the subject headings to find a review or survey.

You can also use keywords to find subject headings when searching the library book catalog.

Also, the MAA's Basic Library List <http://www.maa.org/bl12/TOC.htm> includes some graduate level surveys.



Girih tile pattern from the Darb-i Iman shrine, Iran (1453 C.E.)



Mapping of girih tile pattern from Darb-i Iman shrine to an aperiodic Penrose tile pattern (Lu and Steinhardt, *Science* 315 (Feb 2007): 1106-1110)

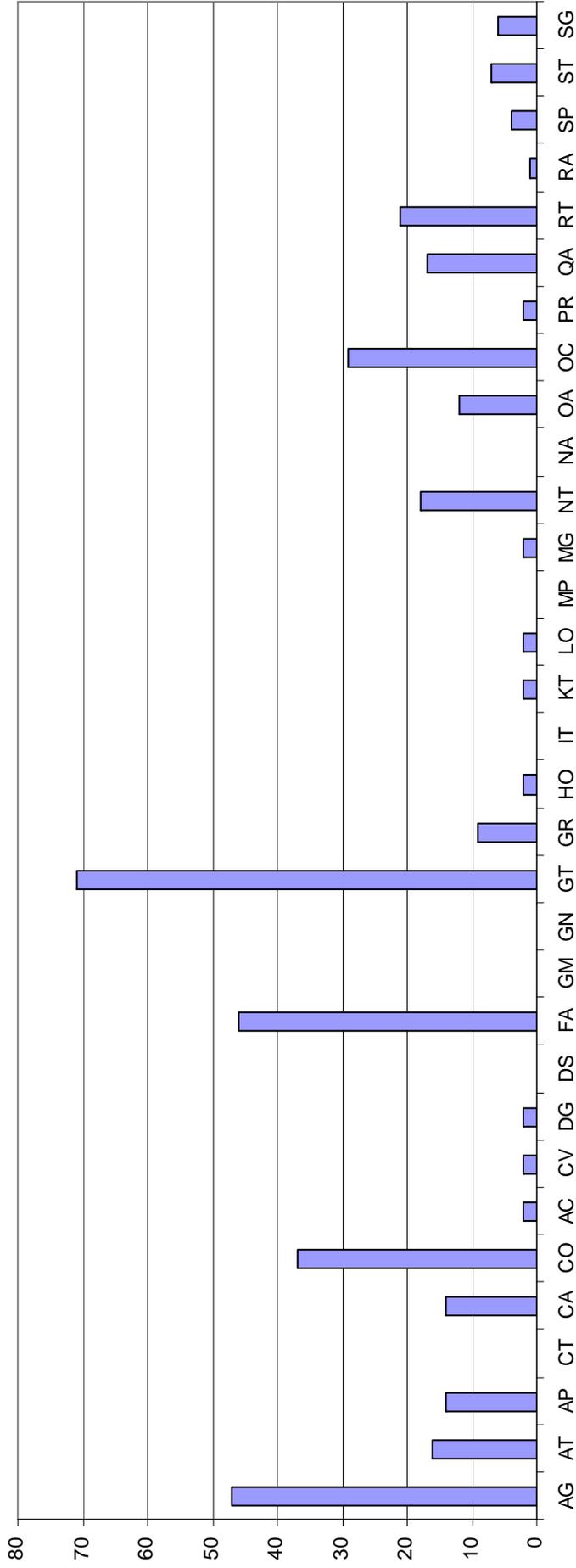
LSU Mathematics on arXiv

See the next page for results of searches by the arXiv mathematics subject classes and "baton rouge."

Do not hesitate to contact the library about your book and journal wish lists
alerche1@lsu.edu

Book orders can often be readily fulfilled. But new journal titles take time to work their way through the library serials budget. We are working on adding the *Journal of Topology, Geometry and Topology*, *Algebraic Geometry and Topology*, and *Communications on Stochastic Analysis*, as requested.

Hits in arXiv search: "baton rouge" AND "math.XX" (subject headings)



Results of searches for the arXiv mathematics subject classes and "baton rouge." For explanation of the two-letter arXiv subject class headings see <http://www.arxiv.org/new/math.html>. This search return approximately two hits for each paper in most cases, so the results are approximately double the number of papers in each subject class. The term "baton rouge" may sometimes come up for reasons other than the affiliation of the authors. This search is not as precise as the analogous search for MSC subjects and LSU affiliation that can be done in MathSciNet (Mathematics Library News 1).