



Nashville, June 1, 2020

Dear Prospective Graduate Student,

I would like to introduce you to the graduate program in mathematics at Vanderbilt University and describe some of the benefits afforded to our graduate students.

Our Ph.D. program received a very favorable evaluation in the latest report on U.S. graduate programs in mathematics from the National Research Council (NRC). Unlike previously published NRC rankings, the most recent report offers “ranges of rankings” for each program rather than a single number. These ranges are computed using statistical analyses of the raw data collected. One of these rankings places us between the top 9% and 24% of the 127 Ph.D. programs surveyed. I invite you to read more about these results at the bottom of this letter. Our presence in the top tier of departments is a testament to the vibrant research and teaching community that is thriving at Vanderbilt University. Our department enjoys an invigorating research and learning environment due to a superb roster of faculty, students, and visitors from around the world.

There are nearly fifty full-time faculty and just forty graduate students in our department, providing an excellent student to faculty ratio. Our faculty includes one Fields Medalist and other world-renowned researchers, leading first-rate research groups in algebra and logic, applied and computational harmonic analysis, approximation theory, combinatorics and graph theory, geometric group theory, geometry and topology, mathematical biology, operator algebras, partial differential equations, and others. You can find a complete list of our faculty along with their research at <https://as.vanderbilt.edu/math/research/facultyresearchareas/>. You can also read our biannual newsletter at <http://as.vanderbilt.edu/math/newsletters/>. Beyond the Department of Mathematics, Vanderbilt University has a wide range of research programs providing the opportunity to get to know, and collaborate with, students and faculty in other departments.

Students who are accepted into Vanderbilt's mathematics program receive a University Tuition Scholarship, a service-free award that pays all the tuition costs and a Graduate Teaching Assistant position currently providing an annual stipend of \$26,000 yearly. Exceptional students will be considered for an honor scholarship that provides up to \$5,000 beyond the standard stipend. The following website gives more information about our graduate program: <http://as.vanderbilt.edu/math/graduate/>.

Online applications are sent directly to the Graduate School and can be accessed from <https://gradschool.vanderbilt.edu/>. The Graduate School Application fee is \$95.00. We require that you take the general GRE and GRE math subject tests. Information about the GRE exams can be found on the web at <http://www.ets.org/gre>. The deadline for the applications for the 2021/2022 academic year is January 1, 2021.

Vanderbilt University is in the flourishing city of Nashville, Tennessee. Nashville, also known as Music City, is home to a large number of museums, theaters, symphony, the famous Grand Ole Opry, public libraries, restaurants, coffee shops, three major league sports teams, and an extraordinary amount and diversity of live music. In a 2010 ranking of college towns, see www.livability.com/top-10-college-towns, Nashville was rated no. 4 nationwide.

I hope you will take a moment to look at and consider our program. For further information, please visit our website <http://as.vanderbilt.edu/math/graduate/>. If you have any questions not addressed there, please contact us at **mathgrad@vanderbilt.edu**.

Sincerely,

Alexander Powell

Alexander Powell

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2010 NRC Report: *Ranking of Vanderbilt Mathematics Graduate Program Improves Dramatically*

The latest report from the National Research Council (NRC) which offers insights into the quality of doctoral programs in mathematics at research universities in the United States, rated the Vanderbilt mathematics program very highly. Released in September 2010, this report no longer provides a definite ranking of programs, but a closer analysis of the data places our program at number 16 in the so-called S ranking, and at number 31 in the R ranking.

Given that graduate education is a top priority for Vanderbilt, this ranking is hardly surprising. “For the last decade, Vanderbilt has been devoting increasing attention and resources to its Ph.D. programs throughout the entire campus,” says Dennis Hall, vice provost for research and dean of the Graduate School. “All of that effort and emphasis has placed graduate education at Vanderbilt on a steep upward trajectory.”

Mathematics department chair Dietmar Bisch adds, “Our department scored highly in several categories that indicate the high quality of our faculty, including percentage of faculty with research grants and publications per faculty. It is exciting for us to receive this recognition in one of the most anticipated evaluations of Ph.D. programs in mathematics.”

The latest NRC report is based on data collected from 127 Ph.D. programs in mathematics during the 2005-2006 academic year. The data was gathered on 20 key characteristics identified by the NRC as indicative of the quality of Ph.D. programs.

The report provided two overall rankings, the S (survey-based) ranking and the R (regression analysis-based) ranking, to illustrate how the data collected can be interpreted. For each ranking two numerical values were computed through a statistical analysis that is explained in detail in the full report. In the “S ranking,” these computations resulted in numbers between 11 and 31 for our program. This places us somewhere between the top 9% and the top 24% of the 127 departments ranked. In the so-called R ranking, a different way of computing weights for the NRC criteria, these two numbers were 17 and 48.

The entire NRC data set can be downloaded from the website <http://www.nap.edu/rdp/>. Alternatively, a sortable list of the NRC rankings is available at: <http://chronicle.com/article/NRC-Rankings-Overview-/124743/>.