

Invited Speakers (2012–2021)
UNCG Number Theory Summer School

January 25, 2024

Chancellor Franklin D. Gilliam, Jr.
University of North Carolina Greensboro
1400 Spring Garden Street
Greensboro, NC 27412

Dear Chancellor Gilliam,

We are writing to urge you to retain UNC Greensboro's PhD program in Computational Mathematics. Over the past decade, the number theorists at Greensboro have organized a series of widely recognised summer schools, and we are among the speakers. This major event is devoted to a different area of number theory every year. It has recruited outstanding students from all across North America and beyond, and attracted substantial competitive funding from NSF, NSA and other sources. The program has raised the profile of your Math Department and your institution as a place of excellence for research and training in this area of mathematics.

As speakers, we were impressed by the quality of UNCG's PhD students, and that impression has been confirmed by their successful careers after graduating, ranging from educating others within math and computer science departments at UNCG and elsewhere, to serving the United States as part of the National Security Agency. Without a PhD program, a summer school of this quality and scale would not be possible.

We do not believe that discontinuing the computational mathematics PhD program is likely to achieve the goal of improving undergraduate success in lower-division math and statistics courses. The presence of a successful PhD program provides a positive feedback loop in improving the quality of a department, drawing in both talented graduate students who provide irreplaceable one-on-one undergraduate tutoring in the department's Help Center and serve as instructors for lower-division courses, as well as outstanding faculty who are attracted by the opportunity to pursue their research interests. While canceling the program may have some short term financial benefit, in the long run it will hamstring the mathematics department's efforts to attract and retain faculty, to raise external funding, and to build the excellence in teaching that we all strive for.

From our perspective, the PhD in computational mathematics is one of UNCG's strengths and contributes considerably to its reputation. It is a field with applications to many disciplines that are central to our modern economy, such as cryptography, artificial intelligence and data analytics. Both graduate and undergraduate students are well served by the department's expertise in this field.

We hope you will not follow Provost Storrs' suggestion to eliminate it.

Sincerely,

Avner Ash	Boston College	2014 speaker
Peter Bruin	Leiden University	2018 speaker
David Farmer	American Institute of Mathematics	2012 speaker
Claus Fieker	RPTU Kaiserslautern-Landau	2018 speaker
Jordi Guàrdia	Universitat Politècnica de Catalunya	2018 speaker
Paul Gunnells	University of Massachusetts Amherst	2014 & 2017 speaker
Florian Hess	University of Oldenburg	2016 speaker
Fredrik Johansson	University of Bordeaux	2015 speaker
John Jones	Arizona State University	2013 speaker
Alex Kontorovich	Rutgers University	2021 speaker
Emmanuel Kowalski	ETH Zürich	2021 speaker
Mark McConnell	Princeton University	2017 speaker
David Roberts	University of Minnesota Morris	2013 speaker
Donald Robertson	University of Manchester	2020 speaker
David Roe	Massachusetts Institute of Technology	2017 speaker
Renate Scheidler	University of Calgary	2016 speaker
Cem Yalcin Yildirim	Bogazici University	2015 speaker