

News Brief Issue #1 October 2019

Baylor University has a long and distinguished history, going back more than a century and half to 1845. Walking step by step in this rich tradition is the Mathematics Department with math majors awarded for over a 100 years. During this time, countless students, faculty, and visitors have made fantastic contributions and helped shape this institution into the premier Christian University that Baylor is today. Far from slowing down, sweeping changes are happening as we speak. Key among them is the adoption of the Strategic Plan Illuminate, aimed at securing R1 status for Baylor University in the next decade.

Meet Mathematics' New Chair



Hello everybody! Allow me to introduce myself; I am Dorina Mitrea, Professor of Mathematics and Chair of the Mathematics Department at Baylor University. Prior to my current appointment I have been a Houchins Professor in the Mathematics Department at the University of Missouri in Columbia. I am thrilled to have the chance to join the faculty at Baylor University and, along with my colleagues, alumni, and friends, to further the initiatives and efforts of this great institution to strengthen scholarship, deepen learning, and advance teaching. This is extremely challenging but very exciting as Baylor University continues to pursue excellence in undergraduate education and growth in graduate education. In particular, we are fully committed to excel in teaching and in serving our students with the type of support that Baylor University is renowned for in the nation and beyond.

I am deeply honored to have the distinguished task of leading the Mathematics Department. I plan to build on its traditional strengths and strategically invest in new areas of research and service. Adding in the pursuit of this goal is my professional expertise in several mainstream branches of mathematics, including harmonic analysis, partial differential equations, differential geometry, and geometric measure theory. I am maintaining an active research program focused on problems at the confluence of these areas which has attracted continuous external grant support in the last 17 years.

For example, the second edition of my monograph "Distributions, Partial Differential Equations, and Harmonic Analysis" has recently been published (2019). In fact, to date I have co-authored seven research monographs published by the prestigious editorial houses of Springer, De Gruyter, Birkhäuser, and American Mathematical Society. In addition, since the early stages of my career, I have been significantly involved in mathematics outreach activities, such as programs for the preparation of teachers and training middle and high school students. For my success on the national stage in the

latter type of activity I had the distinct honor of being recognized by the 43rd President of the USA, George W. Bush, in an Oval Office Ceremony in 2003. In parallel, I have had substantial involvement at the administrative level, including serving as Associate Chair in the Department of Mathematics at the University of Missouri during 2002-2008.

As I embark on this amazing journey, I wish to acknowledge the contributions of my predecessor, Dr. Lance Littlejohn. He has faithfully and tirelessly dedicated a dozen years of his career to the noble task of shaping this department into what it is today. Collectively, we owe Lance a great deal of gratitude for his service. I vow to continue his work and hope to emulate his example of grace and determination.

Now that you know a little about me, I would love to have the chance to get to know you! Please contact me with thoughts, suggestions, or simply for an informal chat via email (Dorina_Mitrea@baylor.edu) or phone (254-710-3165). It is through strong partnerships that we can truly make a difference under the banner of Baylor University.

I wish to leave you with one of my favorite quotes, from one of our contemporary mathematical titans:

"In the broad light of day mathematicians check their equations and their proofs, leaving no stone unturned in their search for rigor. But, at night, under the full moon, they dream, they float among the stars and wonder at the miracles of the heavens. They are inspired. Without dreams there is no art, no mathematics, no life."

Homecoming 2019

Please join us on Saturday, October 12 after the Homecoming Parade (around 10 AM) on the first floor of Sid Richardson. I would very much like to personally meet you. If you are able to attend, please let me know via email (Dorina_Mitrea@baylor.edu) by October 7. I look forward to hearing from you!

Sir Michael Atiyah (2010), UK, Fields Medalist

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