



A WORD FROM...

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The February issue of the *AMS Notices* coincides with the nation's celebration of Black History Month. Four interesting feature articles involving topics from fluid dynamics, diffusion problems, optics and optimal transport problems, and Riordan matrices, written by Black mathematicians, are presented here. The feature articles are: Lucy Campbell's article "Geophysical Fluid Dynamics," Nsoki Mavinga's article "Steklov Spectrum and Diffusion Problems with Nonlinear Boundary Conditions," Henok Mawi's article "Freeform Optics: Optimal Transport, Minkowski Method and Monge Ampere Type Equations," and Naomi Cameron and Asamoah Nkwanta's article "Riordan Matrices and Lattice Path Enumeration."

The 2023 Black History Month national theme is Black Resistance, and this special issue of the *Notices* celebrates articles that emphasize the struggles, resistance, and triumphs of various Black mathematicians and educators. According to the Association for the Study of African American Life and History, the theme of resistance explores how "African Americans have resisted historic and ongoing oppression, in all forms, especially the racial terrorism of lynching, racial pogroms, and police killings since our arrival upon these shores. ...

Education, whether in elementary, secondary, or higher education institutions have been seen as a way for Black people and communities to resist the narrative that Black people are intellectually inferior." See the link <https://asa1h.org/black-history-themes/> for more details of this theme and past.

This year's BHM theme is timely here as this month's *Notices* authors Ben Moynihan and collaborators remember the civil rights activist, educator, and creator of the Algebra Project, Robert P. Moses, in their memorial article for Bob Moses. In his 2001 book with co-author Charles Cobb, Jr., *Radical Equations: Math Literacy and Civil Rights*, Moses asserts "In today's world, economic access and full citizenship depend crucially on math and science literacy. I believe that the absence of math literacy in urban and rural communities throughout this country is an issue as urgent as the lack of registered black voters in Mississippi was in 1961."

Evelyn Lamb, Omayra Ortega, and Robin Wilson's article, "The Role of Mathematics in Today's Movement for Racial Justice" states that, "Using mathematics as a tool to critically analyze systemic racism has a long history in the United States. ... W. E. B. Du Bois in 1903 predicted quite prophetically that 'the problem of the 20th century is the problem of the color line.'" Yet in the 21st century, the color line dilemma continues to plague us.

Jesse Kass's history article, "Joseph Carter Corbin: Arkansas's 'Profound Mathematician'" gives the readers a historical perspective around the theme. Corbin was born in 1833 and passed away in 1911. Kass pens, "Even though Corbin never personally experienced enslavement, his life was significantly constrained by state laws and social practice. For example, Black Ohioans were not allowed to attend public schools, and many private schools were racially segregated." This article notes some of Corbin's legacy. In 1882, he contributed a mathematical problem to *The Mathematical Magazine*, a short-term journal from 1882–1884. From 1895–1902 he regularly contributed to the problem section of the *American Mathematical Monthly*. Corbin was also involved in the establishment of Branch Normal College in 1875, which today is the University of Arkansas at Pine Bluff, a Historical Black College and University (HBCU). Corbin's work demonstrates intellectual and scientific strength, plus shows determination and resistance.

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Johnny Houston's article, "*Passing the Torch for NAM: A Reflection of NAM's Development and Growth*," gives an overview of the first five decades of the National Association of Mathematicians (NAM). Readers of this article will get a glimpse of an organization that was created to resist inequities its members experienced in the math community, past and present. Houston writes, "NAM was founded under the principles of inclusivity, diversity, and equity at a time when major American mathematical sciences organizations were excluding underrepresented American mathematicians of color from their membership, editorial boards, research symposia, and other professional activities."

Sylvia Bozeman and collaborators' article, "*Spelman College: A Model of Success for Producing Black Women in Mathematics*," can serve as a model for other departments. Bozeman and collaborators state, "For the past century, Spelman's mathematics department has worked deliberately to develop and support women in the mathematical sciences. We hope other institutions that want to contribute to increasing the number of women—and especially African American women—who study mathematics and pursue mathematics-related careers may find inspiration from Spelman's proven model."

The Early Career section contains excerpts from the book "*Justice Through the Lens of Calculus: Framing New Possibilities for Diversity, Equity, and Inclusion*," edited by Matthew Voigt and collaborators. The book focuses on best practices for diversity and inclusion. Thirty case studies aim to make calculus available and accessible to previously excluded or underrepresented populations.

Houston gives the *Notices* readers another memorial article, "*Remembering Professor Aderemi O. Kuku (1941–2022): An Internationally Recognized Mathematician and Scholar*." Kuku was a distinguished Nigerian mathematician and scholar in the field of algebra. Additionally, Lawrence Udeigwe presents an engaging opinion article titled, "*Interfacing Math and Jazz*." Finally, there is a review by Sorin Gal of Gaston N'Guerekata's book, "*Almost Periodic and Almost Automorphic Functions in Abstract Spaces*."

The BHM articles in the *Notices* this month promote Black resistance by supporting intellectual development, inclusivity, and diversity in the mathematical sciences. In closing, I am again honored to serve as an associate editor in order to share with the *Notices* readers these fantastic articles.