

The Department of Mathematics presents the

# Dr. Marjorie Lee Browne Colloquium

as part of the University of Michigan's  
Rev. Dr. Martin Luther King, Jr. Symposium



## John Urschel

Class of 1956 Career Development Assistant Professor of Mathematics  
Massachusetts Institute of Technology

Monday, January 19, 2026, 4:00 p.m.

1324 East Hall, 530 Church Street

## Matrices, Moments, and Quadrature

More than a hundred years ago, Chebyshev posed the following problem: “Given the length, weight, position of mass centre and moment of inertia of a material straight line with an unknown density...find the narrowest possible limits for the weight of any segment of the line.” This is one of the earliest examples of a moment problem, the task of obtaining information about a measure from some sequence of its moments. In this talk, we will explore the classical moment problems of the late 19th and early 20th centuries and how they laid the groundwork for the modern computational techniques in numerical analysis and numerical linear algebra.



The Colloquium honors Dr. Marjorie Lee Browne, a prominent mathematician and educator who, in 1949, became only the third African American woman to earn a doctorate in her field and the first African American woman to earn a PhD in Mathematics from the University of Michigan.

Website: [myumi.ch/2mZ9m](http://myumi.ch/2mZ9m)



A reception in the  
Mathematics Upper  
Atrium follows the talk.

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