

## Bailey Rester

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University of Southern Mississippi  
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### Education

Ph.D. in Computational Science, August 2022 (expected)  
The University of Southern Mississippi, Hattiesburg, MS, USA  
Advisor: James V. Lambers

M.S. in Mathematics, December 2020  
The University of Southern Mississippi, Hattiesburg, MS, USA  
Advisor: James V. Lambers

B.S. in Mathematics, December 2018  
The University of Southern Mississippi, Hattiesburg, MS, USA

### Teaching Positions

The University of Southern Mississippi  
Teaching Assistant  
School of Mathematics and Natural Sciences  
Courses taught: College Algebra (MAT 101), Calculus with Analytical Geometry (MAT 167), Quantitative Reasoning (MAT 100).  
Supervisors: Emileigh McCardle, Dr. Bernd Schroeder

Hattiesburg, MS, USA  
January 2019–present

### Awards

1. NASA Mississippi Space Grant Consortium Fellowship, \$22,500, 2021-22
2. SIAM Conference Support Award, SIAM Conference on Applied Linear Algebra, May 2021
3. SIAM Conference Support Award, SIAM Annual Meeting, July 2021

### Journal Articles

1. B. Rester and J. V. Lambers, “Convergence Analysis of Krylov Subspace Spectral Methods for the 1-D Wave Equation in Inhomogeneous Media”, in preparation
2. B. Rester and J. V. Lambers, “Explicit Multistep Krylov Subspace Spectral Methods”, in preparation

### Presentations

1. *Stability Analysis of Krylov Subspace Spectral Methods for the 1-D Wave Equation in Inhomogeneous Media*, SIAM Conference on Applied Linear Algebra, May 2021
2. *A Multistep Spectral Method for Time-Dependent PDEs*, SIAM Annual Meeting, July 2021

### Skills

MATLAB, LaTeX, C++, Python