



MathWorks Math Modeling Challenge

A program of **siam**.

Final Event: April 28, 2025

PROGRAM

7:30 Arrive at Jane Street; all-team photo

WELCOME BREAKFAST

8:00 *Opening Remarks*
Dr. Chris Musco, New York University, M3 Challenge
Director of Technical Computing Judging
Tackling Climate Risks with Data-Driven Approaches
Dr. Yuki Miura, Assistant Professor, New York
University

TEAM PRESENTATIONS

8:45 **St. John's School**
Team #17524

9:10 **Mason High School**
Team #18111

9:35 **Zionsville High School**
Team #18231

10:00 **Rye Country Day School**
Team #18015

10:25 **Haberdashers' Boys' School**
Team #17705
(Technical Computing)

10:50 *10-minute Break*

11:00 **Trinity Preparatory School**
Team #18076
(Technical Computing)

11:25 **North Carolina School of Science-Math**
Team #17928

11:50 **Winchester College**
Team #17781
(Technical Computing)

12:15 **Flint Hill School**
Team #17839

LUNCH

12:40 *Congratulations and Introduction to Jane Street*

HOST PRESENTATION

1:30 *Jane Street Panel*
Marina Zambrano, moderator

AWARDS CEREMONY AND RECEPTION

2:30 *M3 Challenge 20th Anniversary video*
Master of Ceremonies
Dr. Karen Bliss, Senior Manager of Education
and Outreach, SIAM
Remarks
Dr. Suzanne Weekes, Chief Executive Officer, SIAM
*Outstanding Communication of Results and
Technical Computing Scholarship Prizes*
Tanya Kuruvilla, MathWorks
M3 Challenge Team Prizes

3:00–4:00 Team Photos and Jane Street Tours (optional)

3:30–4:30 Meet at Marriott for transport to airport/trains/vans



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Society for Industrial and
Applied Mathematics

Host:
Jane Street
250 Vesey Street
New York, New York 10281

2025 Problem

Hot Button Issue: Staying Cool as the World Heats Up

Of the 794 papers submitted to this year's MathWorks Math Modeling Challenge, 148 (18.6%) advanced to the second round of judging, where 37 were selected for awards and recognition (4.7%).

FINALISTS

M3 Challenge Finalist Awards honor teams for the most outstanding mathematical approaches to the problem through modeling, justifying assumptions, describing their process, analyzing effects of change, and summarizing results. The top six teams will present their papers and winners will be announced at the awards ceremony.

Flint Hill School

Oakton, Virginia (Team #17839)

Coach: Elizabeth Van Lieshout

Students: Jack Dunn, Kevin Harvey,
Billy Ho, Divya Kudva, Neev Patel

Mason High School

Mason, Ohio (Team #18111)

Coach: Colleen Everett

Students: Aneesh Iyer, Ramya Rajan,
Raymond Shao, Vivian Tang,
Mingjia Zhang

North Carolina School of Science-Math

Durham, North Carolina (Team #17928)

Coach: Michael Lavigne

Students: Steven Gu, Grace Luo,
Brandon Willoughby, Brandon Yang,
Jessica Yang

Rye Country Day School

Rye, New York (Team #18015)

Coach: Seb Mineo

Chaarath Badrinath, Dana Balin,
Alyssa Chu, Jaymin Ding, Leah Steyn

St. John's School

Houston, Texas (Team #17524)

Coach: Dwight Raulston

Students: Anik Banerji, David Qian,
John Vu, Brandon Wu, Helen Yang

Zionsville High School

Zionsville, Indiana (Team #18231)

Coach: Dwight Moser

Students: Truman Greaves,
Prabhanjan Jayachandran, Tianle Liang

TECHNICAL COMPUTING FINALISTS

This year 439 papers were considered for M3 Challenge Technical Computing Awards for outstanding use of programming to analyze, design, and conceive a solution for the problem. The top three teams will present their papers and winners will be announced at the awards ceremony.

Haberdashers' Boys' School

Hertfordshire, England (Team #17705)

Coach: Kim Harrison

Students: Rajarshi Mandal,
Devarshi Mandal, Aryan Prabhudesai,
Dawei Tao, Oliver West

Trinity Preparatory School

Winter Park, Florida (Team #18076)

Coach: Donald Worcester

Students: Katherine Alvarez,
Connor Brady, Jerry Chen, Victor Fang,
Kangyi Huang

Winchester College

Hampshire, England (Team #17781)

Coach: Corina Cirstea

Students: Alexander Cirstea,
Andrei Diachuk, Henry Ng, Victor Sim,
Yuyao Xie

TEAM SCHOLARSHIP AWARDS: \$100,000 OR £75,000

M3 Challenge Champion\$20,000 or £15,000+

M3 Challenge Runner Up.....\$15,000 or £11,400+

M3 Challenge Third Place.....\$10,000 or £7,500+

M3 Challenge Finalists (3).....\$5,000 or £3,750+ each

M3 Challenge Semi-Finalists (6).....\$1,500 or £1,100+ each

M3 Challenge Honorable Mentions (19).....\$1,000 or £750+ each

Technical Computing Finalists (3)\$3,000, \$2,000, \$1,000 or £2,250+, £1,500+, £750+

SPARK Award Winners (3).....\$3,000, \$2,000, \$1,000

Outstanding Communication of Results.....\$500 or £375+ each

2025 Problem

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SEMI-FINALISTS

Papers from the following six schools underwent in-depth discussion and were deemed of exceptional quality by judges. These teams are recognized as semi-finalists and will receive awards of \$1,500 each.

Adlai E. Stevenson High School

Lincolnshire, Illinois (Team #17393)

Coach: Paul Kim

Students: Jaden Chen, Audrey Hong, Diana Tang, Lillian Wang, Catherine Zou

High Technology High School

Lincroft, New Jersey (Team #17523)

Coach: Raymond Eng

Students: Rohan Arni, James Chen, Sophia Gao, Niyel Hassan, Vinil Polepalli

Memphis University School

Memphis, Tennessee (Team #18359)

Coach: Steve Gadbois / Students:

Joephen Chen, Alan Cheng, Albert Ding, Rushil Komeravelli, Michael Liu

Metea Valley High School

Aurora, Illinois (Team #17621)

Coach: Diane Hendrix

Students: Ayush Chandra, Nitin Gopala, Ajay Teja Kavuri, Parry Nall, Sanchit Sidhu

Nueva School

Hillsborough, California (Team #18287)

Coach: Ted Theodosopoulos

Students: Oliver Cho, Aryan Mehra, Max Spivakovsky, Cami Yen, William Zhu

Thomas Jefferson High School for Science and Technology

Alexandria, Virginia (Team #18177)

Coach: Sewon Yang

Students: Andrew Choi, Jason Hao, Smaran Kudapa, Vrishak Vemuri, Leah Zhang

HONORABLE MENTIONS

Teams representing the following schools are recognized for honorable mention distinction. Awards of \$1,000 will be awarded to each of these 19 teams for noteworthy submissions.

American Heritage-Boca Delray

Delray Beach, Florida (Team #17766)

Basis School-Chandler

Chandler, Arizona (Team #17442)

Conestoga High School

Berwyn, Pennsylvania (Team #18146)

Conestoga High School

Berwyn, Pennsylvania (Team #18149)

East Brunswick High School

East Brunswick, New Jersey (Team #17730)

Haberdashers' Boys' School

Hertfordshire, England (Team #17705)

Jericho Senior High School

Jericho, New York (Team #18313)

Lambert High School

Suwanee, Georgia (Team #18213)

Livingston High School

Livingston, New Jersey (Team #17595)

Livingston High School

Livingston, New Jersey (Team #17622)

Queen Elizabeth's School

Hertfordshire, England (Team #17410)

Queen Elizabeth's School

Hertfordshire, England (Team #17997)

Sachse High School

Sachse, Texas (Team #18379)

Sagemont Prep Upper School

Weston, Florida (Team #17589)

St John's School

Houston, Texas (Team #17540)

Summit Senior High School

Summit, New Jersey (Team #17866)

Thomas Jefferson High School for Science and Technology

Alexandria, Virginia (Team #18178)

Trinity Preparatory School

Winter Park, Florida (Team #18076)

Winchester College

Hampshire, England (Team #17781)

TECHNICAL COMPUTING HONORABLE MENTIONS

Teams representing the following schools are recognized for technical computing honorable mention distinction.

Centennial High School

Ellicott City, Maryland (Team #17422)

Exeter Mathematics School

Devon, England (Team #17473)

MathWorks Math Modeling Challenge

A program of  SIAM.

ABOUT M3 CHALLENGE

MathWorks Math Modeling Challenge (M3 Challenge) is the prestigious Internet-based competition known for providing a transformative high school experience to inspire students to pursue STEM majors and careers. The contest, organized by Society for Industrial and Applied Mathematics (SIAM) and sponsored by leading software developer MathWorks, is free and open to students in the U.S., England, and Wales. M3 Challenge will award top teams this year with \$100,000+ or £75,000+ in scholarships to use for their higher education. M3 Challenge has awarded more than \$1.95 million in scholarships to date.

Teams of three to five junior/senior or sixth form students spend up to 14 hours on Challenge weekend devising and submitting a solution to the Challenge problem, which is not revealed to them until they log in. Following a rigorous multi-stage judging process, six finalist teams and three technical computing awardees present their findings live to a final judge panel to determine the final rank order. Learn more at m3challenge.siam.org.

ABOUT MATHWORKS

MathWorks is the leading developer of mathematical computing software. MATLAB, the language of engineers and scientists, is a programming environment for algorithm development, data analysis, visualization, and numeric computation. Simulink is a block diagram environment for simulation and Model-Based Design of multidomain and embedded engineering systems. Engineers and scientists worldwide rely on these products to accelerate the pace of discovery, innovation, and development in automotive, aerospace, communications, electronics, industrial automation, and other industries. MATLAB and Simulink are also fundamental teaching and research tools in the world's universities and learning institutions. Founded in 1984, MathWorks employs more than 6,500 people in 34 offices around the world, with headquarters in Natick, Massachusetts, U.S. For additional information, visit mathworks.com.

ABOUT SOCIETY FOR INDUSTRIAL AND APPLIED MATHEMATICS

Society for Industrial and Applied Mathematics (SIAM), headquartered in Philadelphia, Pennsylvania, is an international society of more than 13,000 individual, academic and corporate members from 100+ countries. SIAM helps build cooperation between mathematics and the worlds of science and technology to solve real-world problems through publications, conferences, and communities like chapters, sections, and activity groups. Learn more at siam.org.

ABOUT JANE STREET

Jane Street is a quantitative trading firm with offices worldwide. We hire smart, humble people who love to solve problems, build systems, and test theories. Will our next great idea come from you? Learn more at janestreet.com.

m3challenge.siam.org

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