

WINNERS

Of the 612 papers submitted to this year's MathWorks Math Modeling Challenge, 113 (18.5%) advanced to the second round of judging, where 37 were selected for awards and recognition (6%).

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 prizes of \$1,500 each.

F W Buchholz High School

(Team #15916) Gainesville, Florida Coach: Ziwei Lu

Livingston High School

(Team #15398) Livingston, New Jersey Coach: Cheryl Coursen **Northview High School**

(Team #15938) Sylvania, Ohio Coach: John Eckhart

Peachtree Ridge High School

(Team #15617) Suwanee, Georgia Coach: Donna Greenwood San Dieguito High School Academy

(Team #15751) Encinitas, California Coach: Darlene Blanchard

University High School

(Team #16023) Spokane, Washington Coach: Scott Cooley

HONORABLE MENTIONS

Teams representing the following schools are recognized for Honorable Mention distinction. Prizes of \$1,000 will be awarded to each of these 22 teams for noteworthy submissions.

AMERICAN HERITAGE SCHOOL

PLANTATION, Florida

CANYON CREST ACADEMY

SAN DIEGO, California **HIGH TECHNOLOGY HIGH SCHOOL**

LINCROFT, New Jersey

GLOUCESTER HIGH SCHOOL

GLOUCESTER. Massachusetts

GOV LIVINGSTON HIGH SCHOOL

BERKELEY HTS, New Jersey

GRAMMAR SCHOOL TRUST

LEICESTER, LEICESTER, England

HUNTER COLLEGE HIGH SCHOOL

NEW YORK, New York

JERICHO SENIOR HIGH SCHOOL JERICHO, New York

JULIA R MASTERMAN MID HIGH SCHOOL

PHILADELPHIA, Pennsylvania

MASS ACADEMY-MATH & SCIENCE

WORCESTER, Massachusetts

MAYFIELD SR SCHOOL OF HOLY CHILD

PASADENA, California

NEW CENTURY TECH HIGH SCOOL

HUNTSVILLE, Alabama

NORTHVIEW HIGH SCHOOL

JOHNS CREEK, Georgia

NUEVA SCHOOL

HILLSBOROUGH, California

ST JOHN'S SCHOOL

HOUSTON, Texas

THOMAS JEFFERSON HS-SCI & TECH

ALEXANDRIA, Virginia

TRINITY PREPARATORY SCHOOL

WINTER PARK, Florida

WARD MELVILLE SR HIGH SCHOOL

EAST SETAUKET, New York

WATFORD GRAMMAR SCHOOL **FOR BOYS**

WATFORD, HERTFORDSHIRE, England*

WAYZATA HIGH SCHOOL

PLYMOUTH, Minnesota

WILLIAM FREMD HIGH SCHOOL

PALATINE, Illinois

WINDSOR CHARTER ACADEMY MHS

WINDSOR, Colorado

* top ranking UK team will present their paper

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.

Adlai E. Stevenson High School

(Team #15376), Lincolnshire, Illinois

Coach: Paul Kim

Students: Jack Chen, Collin Fan, Aadit Juneja,

Aayush Kashyap, Nathan Ma

Adlai E. Stevenson High School

(Team #15413), Lincolnshire, Illinois

Coach: Paul Kim

Students: Spandan Goel, Andrew Liu, Joy Qu,

Greycen Ren, Gabriel Visotsky

High Technology High School

(Team #15596), Lincroft, New Jersey

Coach: Raymond Eng

Students: David Chang, Andrew Eng, Kevin Guan,

Alexander Postovskiy, Ivan Wong

Homestead High School

(Team #15333). Meguon, Wisconsin

Coach: Weizhong Wang

Students: Adam Garsha, Jacob Schmidman, Eric Wan,

Ethan Wang

New Trier Township High School

(Team #15522), Winnetka, Illinois

Coach: Bradlev Kuklis

Students: Aruni Chenxi, Nika Chuzhoy, Max Hartman,

Connor Lane, Nathan Liu

Pine View School

(Team #15344), Osprey, Florida

Coach: Mark Mattia

Students: Nolan Boucher, Uday Goyat, John Halcomb,

Max Rudin, Lisa Zhang

TECHNICAL COMPUTING FINALISTS

This year 261 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.

High Technology High School

(Team #15596), Lincroft, New Jersey Coach: Raymond Eng

Students: David Chang, Andrew Eng, Kevin Guan, Alexander Postovskiy, Ivan Wong

New Century Tech High School

(Team #15559), Huntsville, Alabama Coach: Clifford Pate

Students: Ella Duus, Donal Higgins, Alexander Ivan, Shreyas Puducheri

Pine View School

(Team #15344), Osprey, Florida

Coach: Mark Mattia

Students: Nolan Boucher, Uday Goyat, John Halcomb, Max Rudin, Lisa Zhang

TOP RANKED TEAM FROM THE UNITED KINGDOM

The top ranked team from the U.K. (Honorable Mention) will present its paper at the final event.

Watford Grammar School for Boys (Team #15440), Watford, Hertfordshire, England Coach: Ben Eastley / Students: James Elcock, Luke Powney, Hasan Shahrestani, Hamish Starling

TECHNICAL COMPUTING HONORABLE MENTIONS

Teams representing the following schools are recognized for Technical Computing Honorable Mention distinction.

COLUMBUS NORTH HIGH SCHOOL

Columbus, Indiana

LIVINGSTON HIGH SCHOOL

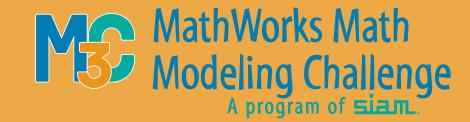
Livingston, New Jersey

LOS ALTOS HIGH SCHOOL

Los Altos, California

PRIZES: \$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 (22)	\$1,000 or £750+ each
Technical Computing Finalists (3)	\$3,000, \$2,000, \$1,000 or £2,250+, £1,500+, £750+
Outstanding Communication of Results	\$500 or £375+ each
Finalist Team Coaches (6)	\$500 or £375+ each



ABOUT M3 CHALLENGE

MathWorks Math Modeling Challenge (M3 Challenge) is the prestigious Internet-based competition known for providing a pinnacle 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. and U.K. 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 \$1.65 million in scholarships to date.

Each school may enter up to two teams of three to five junior/senior or sixth form students, who 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, three technical computing awardees, and top ranking UK teams 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 5,000 people in 16 countries, with headquarters in Natick, Massachusetts, U.S. For additional information, visit *mathworks.com*.

ABOUT SIAM

Society for Industrial and Applied Mathematics (SIAM), headquartered in Philadelphia, Pennsylvania, is an international society of more than 14,000 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 global quantitative trading firm hiring smart, humble people who love to learn. Find out more at ianestreet.com.

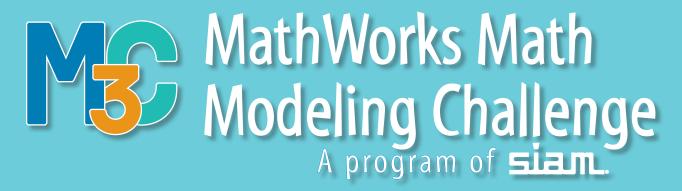
AWARDS AND RECOGNITION

ASAE Associations Advance America (AAA) Award of Excellence Committee Encouraging Corporate Philanthropy (CECP) Excellence Award

The National Association of Secondary School Principals has placed M3 Challenge on the NASSP National Advisory List of Student Contests and Activities since 2010



M3Challenge.siam.org



Final Event: April 25, 2022

PROGRAM

WELCOME BREAKFAST

8:00 Opening Remarks Michelle Montgomery, M3 Challenge Program Director, SIAM

> Dr. Chris Musco, New York University, M3 Challenge Director of Technical Computing Judging

TEAM PRESENTATIONS

- 8:45 ADLAI E STEVENSON HIGH SCHOOL Team #15413
- 9:10 **NEW TRIER TOWNSHIP HIGH SCHOOL** Team #15522
- 9:35 **HOMESTEAD HIGH SCHOOL** Team #15333
- 10:00 WATFORD GRAMMAR SCHOOL FOR BOYS Team #15440
- 10:25 10-minute Break
- 10:35 ADLAI E STEVENSON HIGH SCHOOL Team #15376
- 11:00 PINE VIEW SCHOOL Team #15344
- 11:25 NEW CENTURY TECH HIGH SCHOOL Team #15559
- 11:50 HIGH TECHNOLOGY HIGH SCHOOL Team #15596

LUNCH

12:15 Jane Street Welcome Sandor Lehoczky

HOST PRESENTATION

1:15 Jane Street Panel Kristen Chang, moderator

AWARDS CEREMONY AND RECEPTION

2:00 "Best of" video: 2022 M3 Challenge experience

Remarks

Dr. Katie Kavanagh, Clarkson University, SIAM VP for Education

Outstanding Communication of Results and Technical Computing Scholarship Prizes Tanya Kuruvilla, MathWorks

M3 Challenge Team Prizes Dr. Karen Bliss, Virginia Military Institute

Team Photos

3:15 Meet at Marriott for transport to airport/trains/vans





