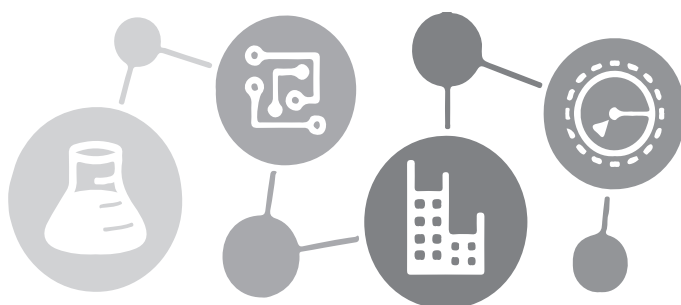


MPE16 & ED16 At-A-Glance



September 30 - October 2, 2016

DoubleTree by Hilton Hotel Philadelphia Center City
Philadelphia, Pennsylvania, USA



**SIAM Conference on
Applied Mathematics Education**
September 30–October 2, 2016
DoubleTree by Hilton Hotel,
Philadelphia Center City
Philadelphia, Pennsylvania, USA

siam.

Society for Industrial and Applied Mathematics
3600 Market Street, 6th Floor
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2016 SIAM Conference on Mathematics of Planet Earth

Thursday, September 29

Friday, September 30

Saturday, October 1

5:00 PM - 8:00 PM

Registration
Aria B - 3rd Floor

6:00 PM - 8:00 PM

Welcome Reception
Hotel Restaurant - Balcony



Friday, September 30

7:15 AM - 5:00 PM

Registration
Aria B - 3rd Floor

8:45 AM - 9:00 AM

Welcoming Remarks
Ormandy Ballroom West - Lobby Level

9:00 AM - 9:30 AM

Coffee Break
Symphony Ballroom - 3rd Floor



9:30 AM - 11:30 AM

Concurrent Sessions
MT1 Conceptual Climate Models
Ormandy Ballroom West - Lobby Level
MS1 Mathematics of Ice Sheets - Part I of II
Aria A - 3rd Floor
MS2 Multi-Scale Modeling of Natural Disasters - Part I of II
Concerto A - 3rd Floor
MS3 Data Driven Infectious Disease Models and Applications - Part I of II
Concerto B - 3rd Floor
MS4 Methodologies for Probabilistic Hazard Assessment - Part I of II
Maestro A - 4th Floor
MS5 Computation and Dynamics in Climate Models - Part I of II
Maestro B - 4th Floor

11:30 AM - 1:00 PM

Lunch Break
Attendees on their own

1:00 PM - 1:45 PM

IP1 Earth System Stability and Mass Extinctions
Daniel Rothman, Massachusetts Institute of Technology, USA
Ormandy Ballroom West - Lobby Level

1:45 PM - 2:15 PM

Coffee Break
Symphony Ballroom - 3rd Floor



2:15 PM - 4:15 PM

Concurrent Sessions
MS6 The Mathematics of Plankton
Ormandy Ballroom West - Lobby Level
MS7 Mathematical Advances in Hydrology: Non-stationarity and Data Assimilation - Part I of II
Concerto A - 3rd Floor
MS8 Data Assimilation in Earth Systems
Concerto B - 3rd Floor
MS9 Theoretical and Computational Geophysical Flows: Many Challenges are Still Left - Part I of II
Maestro A - 4th Floor
MS10 Mathematics of Ice Sheets - Part II of II
Maestro B - 4th Floor
CP1 Ecological and Economic Modeling
Aria A - 3rd Floor

4:15 PM - 4:30 PM

Intermission

4:30 PM - 5:15 PM

IP2 The Problem of Translating Climate Change into Impacts
Michael Hanemann, Arizona State University and University of California, Berkeley, USA
Ormandy Ballroom West - Lobby Level

5:15 PM - 5:30 PM

Intermission

5:30 PM - 6:30 PM

PD1 Forward Looking Panel on Emerging Topics
Ormandy Ballroom West - Lobby Level

6:30 PM - 8:00 PM

Dinner Break
Attendees on their own

8:00 PM - 10:00 PM

PP1 Poster Session
(being held jointly with ED16)
Symphony Ballroom - 3rd Floor



Saturday, October 1

7:45 AM - 5:00 PM

Registration
Aria B - 3rd Floor

9:00 AM - 9:30 AM

Coffee Break
Symphony Ballroom - 3rd Floor



9:30 AM - 11:30 AM

Concurrent Sessions
MT2 Mathematical Issues in Food Systems and Food Security
Ormandy Ballroom West - Lobby Level
MS11 Recent Theoretical and Computational Advances in Prediction of Rare and Extreme Events - Part I of II
Aria A - 3rd Floor
MS12 Mathematical Advances in Hydrology: Non-stationarity and Data Assimilation - Part II of II
Concerto A - 3rd Floor
MS13 Mathematics and Conceptual Climate Modeling
Concerto B - 3rd Floor
MS14 Theoretical and Computational Geophysical Flows: Many Challenges are Still Left - Part II of II
Maestro A - 4th Floor
MS15 Numerical Methods for Geosciences Applications- Part I of III
Maestro B - 4th Floor

11:30 AM - 12:55 PM

Lunch Break
Attendees on their own

12:55 PM - 1:00 PM

Remarks
Ormandy Ballroom West - Lobby Level

1:00 PM - 1:45 PM

IP3 Public Lecture - Assessing Risks to Global Food Systems: Mathematicians, Food System Experts and Insurance
Molly Jahn, University of Wisconsin, Madison, USA
Ormandy Ballroom West - Lobby Level

1:45 PM - 2:15 PM

Coffee Break
Symphony Ballroom - 3rd Floor



2:15 PM - 4:15 PM

Concurrent Sessions
MS16 Doctoral Training in Mathematics of Planet Earth (MPE CDT)
Ormandy Ballroom West - Lobby Level
MS17 Recent Theoretical and Computational Advances in Prediction of Rare and Extreme Events - Part II of II
Aria A - 3rd Floor
MS18 Multi-Scale Modeling of Natural Disasters - Part II of II
Concerto A - 3rd Floor
MS19 Data Driven Infectious Disease Models and Applications - Part II of II
Concerto B - 3rd Floor

2016 SIAM Conference on Mathematics of Planet Earth

Saturday, October 1

Sunday, October 2

MS20 Numerical Methods for Geosciences

Applications- Part II of III

Maestro B - 4th Floor

CP2 Physical Modeling

Maestro A - 4th Floor

4:15 PM - 4:30 PM

Intermission

4:30 PM - 5:15 PM

IP4 Feedbacks Between Soil Engineers and
Vegetation can Increase Ecosystem Robustness

Corina Tamita, Princeton University, USA

Ormandy Ballroom West - Lobby Level

5:15 PM - 5:30 PM

Intermission

5:30 PM - 6:30 PM

SIAG/MPE Business Meeting

(open to SIAG/MPE members)

Ormandy Ballroom West - Lobby Level

Complimentary beer and wine will be served.



Sunday, October 2

7:45 AM - 1:30 PM

Registration

Aria B - 3rd Floor

8:10 AM - 8:15 AM

Closing Remarks

Ormandy Ballroom West - Lobby Level

8:15 AM - 9:00 AM

IP5 Smarter Planet 2.0

Sean McKenna, IBM Research, Ireland

Ormandy Ballroom West - Lobby Level

9:00 AM - 9:30 AM

Coffee Break

Symphony Ballroom - 3rd Floor



9:30 AM - 11:30 AM

Concurrent Sessions

MS21 Rare Event Simulation and Extreme
Events in Climate

Ormandy Ballroom West - Lobby Level

MS22 Methodologies for Probabilistic Hazard
Assessment - Part II of II

Concerto A - 3rd Floor

MS23 Numerical Methods for Geosciences
Applications- Part III of III

Concerto B - 3rd Floor

MS24 Computation and Dynamics in

Climate Models - Part II of II

Maestro B - 4th Floor

CP3 Computational Approaches

Aria A - 3rd Floor

CP4 Simulation and Analysis

Maestro A - 4th Floor

Key to abbreviations and symbols



= Business Meeting



= Coffee Break



= Refreshments Served

IP = Invited Plenary Speaker

CP = Contributed Presentation

MS = Minisymposium

PP = Poster Session

PD = Panel Discussion

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Hotel Restaurant – Balcony



Friday, September 30

7:15 AM – 5:00 PM

Registration
Aria B - 3rd Floor

8:00 AM - 8:15 AM

Welcome Remarks
Ormandy Ballroom East - Lobby Level

8:15 AM - 9:00 AM

IP1 Mathematical Modeling with Elementary School-Aged Students
Elizabeth A. Burroughs, Montana State University, USA
Ormandy Ballroom East - Lobby Level

9:00 AM - 9:30 AM

Coffee Break
Symphony Ballroom - 3rd Floor



9:30 AM - 11:30 AM

Concurrent Sessions

MS1 Data-Driven Mathematics in the Undergraduate Classroom
Ormandy Ballroom East - Lobby Level

PD1 Modeling across the Curriculum: How I use Math in my Job?
Assembly C - Fifth Level

CP1 Modeling Applications
Assembly E - Fifth Level

11:30 AM - 1:00 PM

Lunch Break
Attendees on their own

1:00 PM - 1:45 PM

IP2 Graduate Student Education in Computational Mathematics and Scientific Computing
Margot Gerritsen, Stanford University, USA
Ormandy Ballroom East - Lobby Level

1:45 PM - 2:15 PM

Coffee Break
Symphony Ballroom - 3rd Floor



2:15 PM - 4:15 PM

Concurrent Sessions

MS2 Examples from the National Science Foundation's Enriched Doctoral Training Program

Rhapsody - Fourth Level

MS3 Enhancing Mathematical Learning Experiences with 3D Printing - Part I of II

Ormandy Ballroom East - Lobby Level

MS4 Modeling across the Curriculum: Mathematics and Industry
Assembly C - Fifth Level

MS5 Environmental Modeling in the Classroom, Across Curriculum
Assembly E - Fifth Level

4:15 PM - 4:30 PM

Intermission

4:30 PM - 6:30 PM

Concurrent Sessions

MS6 Enhancing Mathematical Learning Experiences with 3D Printing - Part II of II

Ormandy Ballroom East - Lobby Level

MS7 Modeling across the Curriculum: Modeling Across, Through, & Beyond the Curriculum: One School's Story
Assembly C - Fifth Level

MS8 Exploring Frameworks for the Teaching of Modeling
Assembly E - Fifth Level

CP2 Communities and Initiatives in Applied Mathematics Education
Rhapsody - Fourth Level

6:30 PM - 8:00 PM

Dinner Break
Attendees on their own

8:00 PM - 10:00 PM

PP1 Poster Session
(being held jointly with MPE16)
Symphony Ballroom - 3rd Floor



7:45 AM – 5:00 PM

Registration
Aria B - 3rd Floor

8:10 AM - 8:15 AM

Remarks
Ormandy Ballroom East - Lobby Level

8:15 AM - 9:00 AM

IP3 Mathematical Modeling: Changing the Landscape of the Mathematics Classroom
Maria Hernandez, North Carolina School of Science and Mathematics and Deerfield Academy, USA
Ormandy Ballroom East - Lobby Level

9:00 AM - 9:30 AM

Coffee Break
Symphony Ballroom - 3rd Floor



9:30 AM - 11:30 AM

Concurrent Sessions

MS9 Approaches to Mentorship in Undergraduate Research
Rhapsody - Fourth Level

MS10 Teaching at Small Colleges: Challenges and Opportunities
Ormandy Ballroom East - Lobby Level

MS11 Modeling across the Curriculum: GAIMME: Addressing Mathematical Modeling Education Across the Curriculum
Assembly C - Fifth Level

MS12 Implementing Mathematical Modeling in the Elementary Grades and Beyond
Assembly E - Fifth Level

11:30 AM - 1:00 PM

Lunch Break
Attendees on their own

2016 SIAM Conference on Applied Mathematics Education

Saturday, October 1

Sunday, October 2

1:00 PM - 1:45 PM

IP4 Lean Out: Connecting Outside the Ivory Tower
Suzanne L. Weekes, Worcester Polytechnic Institute, USA
Ormandy Ballroom East - Lobby Level

1:45 PM - 2:15 PM

Coffee Break
Symphony Ballroom - 3rd Floor



2:15 PM - 4:15 PM

Concurrent Sessions

MS13 Experience of REU Site Directors in Applied Mathematics
Rhapsody - Fourth Level

MS14 Game Theory in the Mathematics Curriculum
Ormandy Ballroom East - Lobby Level

MS15 Early Experiences in Mathematical Modeling for Undergraduates
Assembly E - Fifth Level

PD2 Modeling across the Curriculum: Teaching Math Modeling – Session I
Assembly C - Fifth Level

4:15 PM - 4:30 PM

Intermission

4:30 PM - 6:30 PM

Concurrent Sessions

MS16 Providing Undergraduate Research Opportunities
Rhapsody - Fourth Level

MS17 Teaching Linear Algebra with Applications
Ormandy Ballroom East - Lobby Level

MS18 Varying Perspectives of a Mathematics Modeling Course
Assembly E - Fifth Level

PD3 Modeling across the Curriculum: Teaching Math Modeling – Session II
Assembly C - Fifth Level

6:30 PM - 8:00 PM

Dinner Break
Attendees on their own

8:00 PM - 8:45 PM

SIAG/ED Business Meeting (open to SIAG/ED members)
Ormandy Ballroom East - Lobby Level
Complimentary beer and wine will be served.



7:45 AM - 1:30 PM

Registration
Aria B - 3rd Floor

8:10 AM - 8:15 AM

Closing Remarks
Ormandy Ballroom East - Lobby Level

8:15 AM - 9:00 AM

IP5 Title Not Available
Philip Uri Treisman, The University of Texas at Austin, USA
Ormandy Ballroom East - Lobby Level

9:00 AM - 9:30 AM

Coffee Break
Symphony Ballroom - 3rd Floor



9:30 AM - 11:30 AM

Concurrent Sessions

MS19 Increasing Diversity and Inclusion in Mathematics: Some Inspiring Initiatives
Rhapsody - Fourth Level

MS20 Modeling across the Curriculum: Computing across the Curriculum
Assembly C - Fifth Level

CP3 Simulation and Problem Solving in Applied Mathematics Education
Ormandy Ballroom East - Lobby Level

11:30 AM - 1:00 PM

Lunch Break
Attendees on their own

1:00 PM - 3:00 PM

PD4 Modeling across the Curriculum: Planning Workshop
Assembly C - Fifth Level

Key to abbreviations and symbols



= Business Meeting



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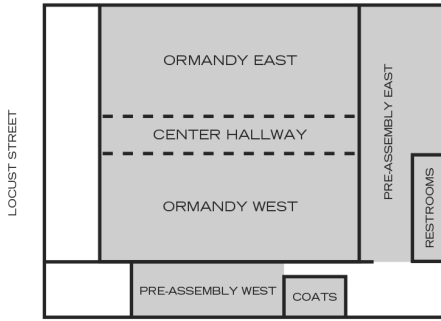
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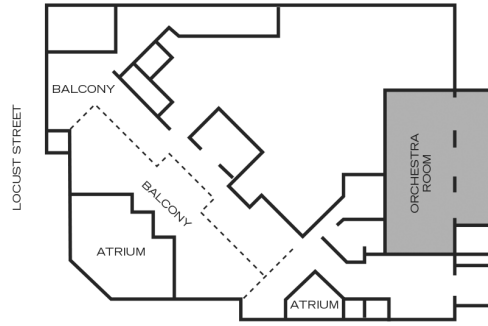
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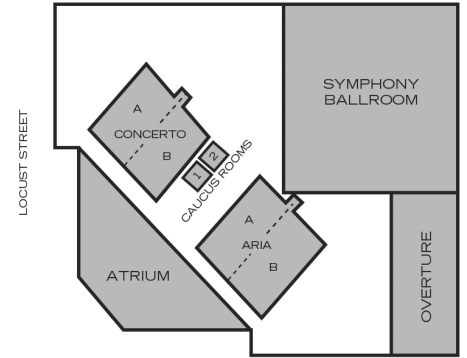
DoubleTree by Hilton Hotel Floor Plan



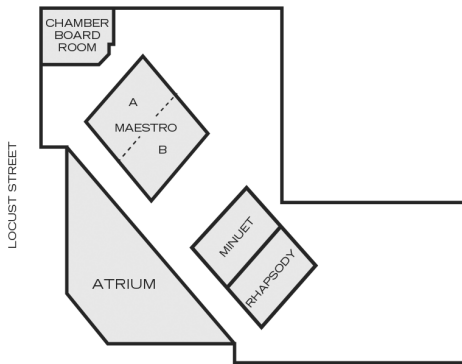
BROAD STREET
LOBBY LEVEL



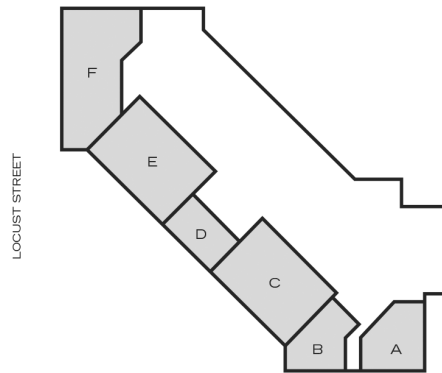
BROAD STREET
MEZZANINE LEVEL



BROAD STREET
THIRD FLOOR



BROAD STREET
FOURTH FLOOR



BROAD STREET
FIFTH FLOOR
ASSEMBLY ON FIVE