At-a-Glance Schedule



Conference onNonlinear Wavesand Coherent Structures

June 24–27, 2024 Lord Baltimore Hotel Baltimore, MD, U.S.

Online Program and Mobile App

Attendees are encouraged to view the Online Program Schedule: https://www.siam.org/conferences/cm/program/program-and-abstracts/nwcs24-program-abstracts

The Mobile App and Online Program Schedule contain the most up-to-date information.

A searchable abstract document is also posted.

SIAM Events Mobile App



www.tripbuildermedia.com/apps/siam

Society for Industrial and Applied Mathematics
3600 Market Street, 6th Floor

Philadelphia, PA 19104-2688 U.S. Telephone: +1-215-382-9800

Sunday, June 23

Monday, June 24

Tuesday, June 25

4:00 p.m. - 6:00 p.m.

Registration Ballroom Foyer

Monday, June 24

7:30 a.m. - 5:00 p.m.

Registration

Ballroom Foyer

8:30 a.m. – 10:30 a.m.

Concurrent Sessions

MS2 Wave Propagation in Lattice Dynamical

Systems - Part I of II Baltimore Theater

MS3 Pattern Formation in Biological Applications - Part I of II

Salon A

MS4 Analysis and Numerical Computations of Evolutionary Equations: Applications and Experiments - Part I of II

Salon B

MS5 Vorticity Dynamics in Classical and Quantum Fluids - Part I of II

 $Salon\ D$

MS6 Stability of Traveling Waves - Theoretical and Numerical Methods - Part I of II

Salon E

MS7 Nonlinear Microresonators and Frequency Microcombs: Experiment, Theory and Simulation -Part I of II

Hanover A

CP1 Applications of Linear Waves

Hanover B

10:30 a.m. - 11:00 a.m.

Coffee Break

Versailles

11:00 a.m. – 12:10 p.m.

IP1 Opening Remarks and Presentation: The Spatiotemporal Route to Turbulence

Dwight Barkley, University of Warwick, United Kingdom

Salon C

12:10 p.m. - 2:30 p.m.

Lunch Break

2:30 p.m. – 4:30 p.m.

Concurrent Sessions

MT1 Vladimir Zakharov in Science of Nonlinear Phenomena

Salon C

MS8 Wave Propagation in Lattice Dynamical Systems - Part II of II

Baltimore Theater

MS9 Pattern Formation in Biological Applications - Part II of II

Salon A

MS10 Analysis and Numerical Computations of Evolutionary Equations: Applications and Experiments - Part II of II

Salon B

MS11 Vorticity Dynamics in Classical and Quantum Fluids - Part II of II

Salon D

MS12 Stability of Traveling Waves - Theoretical and Numerical Methods - Part II of II

Salon E

MS13 Nonlinear Microresonators and Frequency Microcombs: Experiment, Theory and Simulation -Part II of II

Hanover A

CP2 Mathematical Methods for Nonlinear Waves Hanover R

4:30 p.m. – 5:00 p.m.

Coffee Break

Versailles

5:00 p.m. - 6:00 p.m.

IP2 Breathers in PDE's and Lattice Systems C. Eugene Wayne, Boston University, U.S. *Salon C*

Tuesday, June 25

7:30 a.m. - 5:30 p.m.

Registration

Ballroom Foyer

8:30 a.m. – 10:30 a.m.

Concurrent Sessions

MT2 An Introduction to Dispersive Hydrodynamics and Dispersive Shock Waves

Salon C

MS14 Tribute Session for VE Zakharov: Exploring Nonlinear Waves and Singularities - Part I of II Baltimore Theater

MS15 Recent Developments in Quasi-Periodic

Patterns

Salon A

MS16 Evolution Equations and Integrable Systems - Part I of II

Salon B

MS17 Advances in Stability Analysis for Nonlinear Waves - Part I of II

Salon D

MS18 Steady Water Waves - Part I of II *Salon E*

MS19 Topologically Protected Wave Motion: Theory and Computation - Part I of II

Hanover A

CP3 Numerical Methods for Nonlinear Waves *Hanover B*

10:30 a.m. – 11:00 a.m.

Coffee Break

Versailles

11:00 a.m. - 11:15 a.m.

Announcements

Salon C

11:00 a.m. - 12:00 p.m.

IP3 Instability of Peaked Waves in Hydrodynamical Models

Dmitry Pelinovsky, McMaster University, Canada Salon C

12:00 p.m. – 2:30 p.m.

Lunch Break

2:30 p.m. - 4:30 p.m.

Concurrent Sessions

Baltimore Theater

Waves - Part II of II

MS20 Dispersive Hydrodynamics and Applications - Part I of II

- Part I of II

MS21 Tribute Session for VE Zakharov: Exploring Nonlinear Waves and Singularities - Part II of II

MS22 New Results in Integrable Nonlocal Wave Models - Part I of II

Salon A

MS23 Evolution Equations and Integrable Systems - Part II of II

Salon B

MS24 Advances in Stability Analysis for Nonlinear

Salon D

MS25 Steady Water Waves - Part II of II

Salon E

MS26 Topologically Protected Wave Motion:

Theory and Computation - Part II of II $\,$

Hanover A

CP4 Nonlinear Schrodinger and Related Models & Applications

Hanover B

4:30 p.m. – 5:00 p.m.

Coffee Break

Versailles

5:00 p.m. – 5:15 p.m.

Announcements

Salon C

5:00 p.m. - 6:00 p.m.

IP4 Localised Structures in Reaction-Diffusion Systems for Cell Polarity Formation

Alan R. Champneys, University of Bristol, United Kingdom

Salon C

Tuesday, June 25

Wednesday, June 26

Thursday, June 27

6:00 p.m. - 7:30 p.m.

Dinner Break

7:30 p.m. – 9:30 p.m.

PP1 Reception and Poster Session

Versailles

Wednesday, June 26

7:30 a.m. - 5:30 p.m.

Registration

Ballroom Foyer

8:30 a.m. - 10:30 a.m.

Concurrent Sessions

MS27 Dispersive Hydrodynamics and Applications

- Part II of II

Salon C

MS28 Reaction Diffusion Mechanisms for Localised

Patterns and Waves - Part I of II

Baltimore Theater

MS29 New Results in Integrable Nonlocal Wave

Models - Part II of II

Salon A

MS30 Peakons: Existence, Stability, and Beyond -

Part I of II

Salon B

MS31 Experimental Measurements and

Observations of New Phenomena in Fluid

Dynamics - Part I of II

Salon L

MS32 Recent Developments in Dispersive Partial

Differential Equations - Part I of II

Salon E

MS33 New Horizons in the Modelling of Interfacial

Flows - Part I of II

Hanover A

8:30 a.m. – 10:50 a.m.

CP5 Nonlinear Waves: Analysis and Applications

Hanover B

10:30 a.m. – 11:00 a.m.

Coffee Break

Versailles

11:00 a.m. – 12:00 p.m.

IP5 Inverse Scattering Transform for Nonlinear Schrödinger Systems on a Nontrivial Background: A

Survey of Classical Results, New Developments and

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Future Directions

Barbara Prinari, University at Buffalo, U.S

Salon C

12:00 p.m. – 2:30 p.m.

Lunch Break

2:30 p.m. – 4:30 p.m.

Concurrent Sessions

MT3 Data-driven Methods for Dynamic Systems

Salon C

MS34 Reaction Diffusion Mechanisms for Localised

Patterns and Waves - Part II of II

Baltimore Theater

MS35 Water Waves - Part I of II

Salon A

MS36 Peakons: Existence, Stability, and Beyond -

Part II of II

Salon B

MS37 Experimental Measurements and

Observations of New Phenomena in Fluid Dynamics

- Part II of II

Salon D

MS38 Recent Developments in Dispersive Partial

Differential Equations - Part II of II

Salon F.

MS39 New Horizons in the Modelling of Interfacial

Flows - Part II of II

Hanover A

MS40 Patterns on Curved Surfaces

Hanover B

4:30 p.m. – 5:00 p.m.

Coffee Break

Versailles

5:00 p.m. - 6:00 p.m.

SP1 Martin D. Kruskal and T. Brooke Benjamin Prize in Nonlinear Waves Award Presentations and

Martin D. Kruskal Prize Lecture

Thanasis Fokas, University of Cambridge, United

Kingdom

Salon C

6:00 p.m. – 7:30 p.m.

Dinner Break

7:30 p.m. – 8:30 p.m.

SIAG/NWCS Business Meeting.

Complimentary beer and wine will be served. Salon C

Thursday, June 27

7:30 a.m. – 3:00 p.m.

Registration

Ballroom Foyer

8:30 a.m. - 10:30 a.m.

Concurrent Sessions

MS41 Nonlinear Water Waves

Salon C

MS42 Advances in Boundary Value Problems for Integrable and Linear PDEs - Part I of II

Baltimore Theater

MS43 Water Waves - Part II of II

Salon A

MS44 The Effect of Noise on Waves and Coherent

Structures - Part I of II

Salon B

MS45 Recent Advances in Understanding of Wave Dynamics in Neuroscience, Optics, Fluid Mechanics

and Turbulence - Part I of II

Salon D

MS46 Existence and Stability of Nonlinear Patterns

Salon E

MS47 Analytical and Numerical Methods in

Nonlinear Wave Propagation - Part I of II

Hanover A

MS48 Nonlinear Waves and Coherent Structures on

Lattices

Hanover B

10:30 a.m. - 11:00 a.m.

Coffee Break

Versailles

11:00 a.m. – 12:10 p.m.

IP6 Closing Remarks and Presentation: Universal

Dynamics of Damped-Driven Systems: The Logistic Map as a Normal Form for Energy Balance and

Pattern Formation

J. Nathan Kutz, University of Washington, U.S. Salon C.

12:10 p.m. – 2:30 p.m.

Lunch Break

2:30 p.m. – 4:30 p.m.

Concurrent Sessions

MS1 Nonlinear Waves in Optics

Salon C

MS49 Advances in Boundary Value Problems for

Integrable and Linear PDEs - Part II of II

Baltimore Theater
MS50 The Effect of Noise on Waves and Coherent

Structures - Part II of II

Salon B

MS51 Recent Advances in Understanding of Wave Dynamics in Neuroscience, Optics, Fluid Mechanics

and Turbulence - Part II of II

Salon D

MS52 Analytical and Numerical Methos in

Nonlinear Wave Propagation - Part II of II *Hanover A*

ABBREVIATION KEY

CP = Contributed Presentation Session

IP = Invited Plenary Speaker

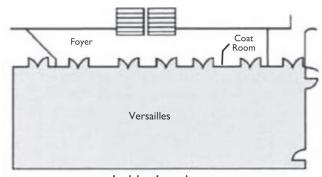
MS = Minisymposium

MT = Minitutorial

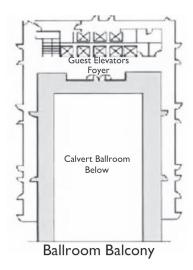
PP = Poster Session

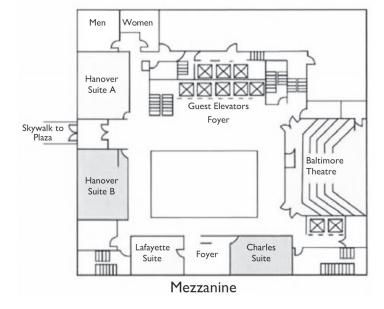
SP = Special Lecture

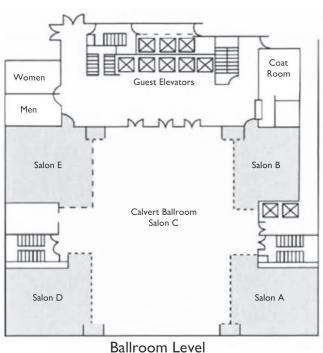
Lord Baltimore Hotel Floor Plans



Lobby Level







Thank you to our sponsor and funding agency



