

At-A-Glance

SIAM Conference on

OPTIMIZATION

Based on Audet and Dennis' plot of Kolda,
Lewis and Torczon's modification of the
Dennis-Wood canoe function.



May 22-25, 2017
Sheraton Vancouver Wall Centre
Vancouver, British Columbia, Canada

SIAM 2017 Events Mobile App

Scan the QR code with any QR reader and download the TripBuilder EventMobile™ app to your iPhone, iPad, iTouch or Android mobile device. You can also visit www.tripbuildermedia.com/apps/siamevents



siam®

Society for Industrial and Applied Mathematics
3600 Market Street, 6th Floor
Philadelphia, PA 19104-2688 USA
Telephone: +1-215-382-9800 Fax: +1-215-386-7999
Conference E-mail: meetings@siam.org
Conference Web: www.siam.org/meetings/
Membership and Customer Service:
(800) 447-7426 (USA & Canada) or
+1-215-382-9800 (worldwide)
www.siam.org/meetings/op17

Sunday, May 21

Monday, May 22

Monday, May 22

5:00 PM - 8:00 PM

Registration
Grand Ballroom Foyer - North Tower

Monday, May 22

7:00 AM - 7:00 PM

Registration
Grand Ballroom Foyer - North Tower

8:00 AM - 8:15 AM

Welcome Remarks
Grand Ballroom AB - North Tower

8:15 AM - 9:00 AM

IP1 Rigorous Guarantees for Nonconvex Optimization?
Martin Wainwright, University of California, Berkeley, USA
Grand Ballroom AB - North Tower

9:00 AM - 9:30 AM

Coffee Break
Grand Ballroom CD - North Tower



9:30 AM - 11:30 AM

Concurrent Sessions

MT1 Optimal Power Flow
Grand Ballroom AB - North Tower

MS1 Recent Progress in Conic Programming - Part I of II
Pavilion Ballroom A - Third Floor North Tower

MS2 Optimization with Polynomials, Matrices and Tensors - Part I of II
Pavilion Ballroom B - Third Floor North Tower

MS3 PDE-Constrained Optimization, Control and Games: New Models and Methods - Part I of II
Pavilion Ballroom C - Third Floor North Tower

MS4 Lift and Project Methods in Data Analysis
Pavilion Ballroom D - Third Floor North Tower

MS5 Efficient Algorithms For Large Convex Optimization Problems - Part I of III
Junior Ballroom A - Third Floor North Tower

MS6 Optimization with PDEs: Theory and Numerics - Part I of III
Junior Ballroom B - Third Floor North Tower

MS7 Recent Advances in Large-scale Nonlinear Optimization - Part I of II
Junior Ballroom C - Third Floor North Tower

MS8 Low-complexity Algorithms for Structured Optimization
Junior Ballroom D - Third Floor North Tower

MS9 Nonsmooth Optimization with Complex Constraints: Duality, Algorithms, and Applications - Part I of III
Parksville - Third Floor North Tower

MS10 Structured Integer Programs
Orca - Third Floor B Tower

MS11 Advances in Dynamic Optimization - Part I of III
Finback - Third Floor B Tower

MS12 Stochastic Optimization for Hydroelectric Systems - Part I of II
Beluga - Third Floor B Tower

MS13 Nonconvex Optimization for Imaging Analysis
Azure - Third Floor South Tower

MS14 Nonlinear and Stochastic Optimization - Part I of II
Gulf Islands B - Lower Lobby North Tower

MS15 Optimization and Large-Scale Data Analysis - Part I of III
Gulf Tower C - Lower Lobby North Tower

11:30 AM - 1:00 PM

Lunch Break
Attendees on their own

11:30 AM - 1:00 PM

Book Series Editorial Board Meeting
Granville - Fourth Floor South Tower

1:00 PM - 1:45 PM

IP2 Innovation in Big Data Analytics
Eva K. Lee, Georgia Institute of Technology, USA
Grand Ballroom AB - North Tower

1:45 PM - 2:00 PM

Intermission

2:00 PM - 4:00 PM

Concurrent Sessions

MS16 Recent Progress in Conic Programming - Part II of II
Pavilion Ballroom A - Third Floor North Tower

MS17 Optimization with Polynomials, Matrices and Tensors - Part II of II
Pavilion Ballroom B - Third Floor North Tower

MS18 PDE-Constrained Optimization, Control and Games: New Models and Methods - Part II of II
Pavilion Ballroom C - Third Floor North Tower

MS19 Recent Developments in First-order Methods for Convex Optimization
Pavilion Ballroom D - Third Floor North Tower

MS20 Efficient Algorithms For Large Convex Optimization Problems - Part II of III
Junior Ballroom A - Third Floor North Tower

MS21 Optimization with PDEs: Theory and Numerics - Part II of III
Junior Ballroom B - Third Floor North Tower

MS22 Recent Advances in Large-scale Nonlinear Optimization - Part II of II
Junior Ballroom C - Third Floor North Tower

MS23 Sparse Optimization and Signal Processing
Junior Ballroom D - Third Floor North Tower

MS24 Nonsmooth Optimization with Complex Constraints: Duality, Algorithms, and Applications - Part II of III
Parksville - Third Floor North Tower

MS25 Computational Mixed Integer Conic Programming
Orca - Third Floor B Tower

MS26 Advances in Dynamic Optimization - Part II of III
Finback - Third Floor B Tower

MS27 Stochastic Optimization for Hydroelectric Systems - Part II of II
Beluga - Third Floor B Tower

MS28 Optimization Algorithms for Learning and Decentralized Estimation
Azure - Third Floor South Tower

MS29 Nonlinear and Stochastic Optimization - Part II of II
Gulf Islands B - Lower Lobby North Tower

MS30 Optimization and Large-Scale Data Analysis - Part II of III
Gulf Tower C - Lower Lobby North Tower

4:00 PM - 4:30 PM

Coffee Break
Grand Ballroom CD - North Tower



4:30 PM - 6:30 PM

Concurrent Sessions

MS31 Efficient Algorithms For Large Convex Optimization Problems - Part III of III
Junior Ballroom A - Third Floor North Tower

MS32 Optimization with PDEs: Theory and Numerics - Part III of III
Junior Ballroom B - Third Floor North Tower

MS33 Nonsmooth Optimization with Complex Constraints: Duality, Algorithms, and Applications - Part III of III
Parksville - Third Floor North Tower

Monday, May 22

Tuesday, May 23

Tuesday, May 23

MS34 Advances in Dynamic Optimization - Part III of III
Finback - Third Floor B Tower

MS35 Optimization and Large-Scale Data Analysis - Part III of III
Gulf Islands C - Lower Lobby North Tower

CP1 Applications in Medicine
Grand Ballroom AB - North Tower

CP2 Robust Optimization
Pavilion Ballroom A - Third Floor North Tower

CP3 Optimal Control
Pavilion Ballroom B - Third Floor North Tower

CP4 PDE-Constrained Optimization and Applications
Pavilion Ballroom C - Third Floor North Tower

CP5 Stochastic Optimization and Applications - Part I
Pavilion Ballroom D - Third Floor North Tower

CP6 Nonsmooth Optimization
Junior Ballroom C - Third Floor North Tower

CP7 Engineering Applications - Part I
Junior Ballroom D - Third Floor North Tower

CP8 Network Optimization and Applications
Orca - Third Floor B Tower

CP9 Optimization Software
Beluga - Third Floor B Tower

CP10 Nonlinear Optimization - Part I
Azure - Third Floor South Tower

CP11 Nonlinear Optimization and Applications
Gulf Islands B - Lower Lobby North Tower

6:30 PM - 8:30 PM

PP1 Welcome Reception and Poster Session
Grand Ballroom CD - North Tower



Tuesday, May 23

7:45 AM - 3:30 PM

Registration
Grand Ballroom Foyer - North Tower

8:10 AM - 8:15 AM

Announcements
Grand Ballroom AB - North Tower

8:15 AM - 9:00 AM

IP3 Optimizing Today's Communication Networks
Zhi-Quan Luo, The Chinese University of Hong Kong, Hong Kong
Grand Ballroom AB - North Tower

9:00 AM - 9:30 AM

Coffee Break
Grand Ballroom CD - North Tower



9:30 AM - 11:30 AM

Concurrent Sessions

MT2 Stochastic Optimization for Machine Learning
Grand Ballroom AB - North Tower

MS36 Infinite Dimensional Nonsmooth Optimization
Pavilion Ballroom A - Third Floor North Tower

MS37 Polynomial Optimization and Sums-of-squares
Pavilion Ballroom B - Third Floor North Tower

MS38 PDE-Constrained Optimization with Reduced Order Models
Pavilion Ballroom C - Third Floor North Tower

MS39 Convexification Techniques in Optimization - Part I of II
Pavilion Ballroom D - Third Floor North Tower

MS40 Uncertainty in Optimization and Nash Games: Sampling-based Algorithms
Junior Ballroom A - Third Floor North Tower

MS41 Optimization Algorithms for High-Performance and Embedded Computing Systems - Part I of II
Junior Ballroom B - Third Floor North Tower

MS42 Recent Advances in Quasi-Newton Methods
Junior Ballroom C - Third Floor North Tower

MS43 Relative Entropy Optimization and its Applications
Junior Ballroom D - Third Floor North Tower

MS44 Stochastic and Large-Scale Optimization Methods - Part I of II
Parksville - Third Floor North Tower

MS45 Nested Minimum Cuts on Parameterized Networks
Orca - Third Floor B Tower

MS46 Variational Analysis and Modern Statistics
Finback - Third Floor B Tower

MS47 Stability and Robustness in Gas Network Optimization
Beluga - Third Floor B Tower

MS48 Risk-Averse Optimization for Engineering Applications - Part I of II
Azure - Third Floor South Tower

MS49 Nonconvex Optimization in Data Analysis - Part I of III
Gulf Islands B - Lower Lobby North Tower

MS50 Algorithms for Reinforcement Learning - Part I of II
Gulf Islands C - Lower Lobby North Tower

11:30 AM - 1:00 PM

Lunch Break
Attendees on their own

11:30 AM - 1:00 PM

SIOPT Editorial Board Meeting
Granville - Fourth Floor South Tower

1:00 PM - 1:45 PM

SP1 SIAG/OPT Prize Lecture: Proximal Minimization Algorithms for Nonconvex and Nonsmooth Problems
Shoham Sabach, Technion Israel Institute of Technology, Israel
Grand Ballroom AB - North Tower

1:45 PM - 2:15 PM

Coffee Break
Grand Ballroom CD - North Tower



2:15 PM - 4:15 PM

Concurrent Sessions

MS51 Algebraic Aspects of Semidefinite Programming
Pavilion Ballroom A - Third Floor North Tower

MS52 Topics in Infinite-dimensional Optimization
Pavilion Ballroom B - Third Floor North Tower

MS53 PDE-Constrained Optimization and Applications
Pavilion Ballroom C - Third Floor North Tower

MS54 Convexification Techniques in Optimization - Part II of II
Pavilion Ballroom D - Third Floor North Tower

MS55 Optimization Methods Exploiting Error Bounds
Junior Ballroom A - Third Floor North Tower

MS56 Optimization Algorithms for High-Performance and Embedded Computing Systems - Part II of II
Junior Ballroom B - Third Floor North Tower

MS57 Recent Advances in Nonlinear Programming Algorithms
Junior Ballroom C - Third Floor North Tower

MS58 Nonconvex Optimization for Machine Learning
Junior Ballroom D - Third Floor North Tower

MS59 Stochastic and Large-Scale Optimization Methods - Part II of II
Parksville - Third Floor North Tower

MS60 Discrete Methods for Applied Mixed Integer Nonlinear Programming
Orca - Third Floor B Tower

2017 SIAM Conference on Optimization At-A-Glance

Wednesday, May 24

Wednesday, May 24

Wednesday, May 24

MS61 Complementarity Problems and Applications

Finback - Third Floor B Tower

MS62 Matrix Optimization and Its Applications

Beluga - Third Floor B Tower

MS63 Risk-Averse Optimization for Engineering Applications - Part II of II

Azure - Third Floor South Tower

MS64 Nonconvex Optimization in Data Analysis - Part II of III

Gulf Islands B - Lower Lobby North Tower

MS65 Algorithms for Reinforcement Learning - Part II of II

Gulf Islands C - Lower Lobby North Tower

4:15 PM - 4:30 PM

Intermission

4:30 PM - 5:15 PM

SIAG/OPT Business Meeting

Grand Ballroom AB - North Tower

Complimentary beer and wine will be served.



Wednesday, May 24

7:45 AM - 5:00 PM

Registration

Grand Ballroom Foyer - North Tower

8:10 AM - 8:15 AM

Announcements

Grand Ballroom AB - North Tower

8:15 AM - 9:00 AM

IP4 Subgradient Methods

James M. Renegar, Cornell University, USA

Grand Ballroom AB - North Tower

9:00 AM - 9:30 AM

Coffee Break

Grand Ballroom CD - North Tower



9:30 AM - 11:30 AM

Concurrent Sessions

MS66 Robustness and Dynamics in Optimization - Part I of III

Grand Ballroom AB - North Tower

MS67 Novel Applications for Second-Order Cone Programming

Pavilion Ballroom A - Third Floor North Tower

MS68 Geometry, Duality, and Complexity in Convex Optimization - Part I of II

Pavilion Ballroom B - Third Floor North Tower

MS69 Computation, Learning and Uncertainty in PDE Constrained Optimization Models - Part I of II

Pavilion Ballroom C - Third Floor North Tower

MS70 First-order Methods and Applications - Part I of III

Pavilion Ballroom D - Third Floor North Tower

MS71 Smoothing and Regularization Techniques in Optimization - Part I of II

Junior Ballroom A - Third Floor North Tower

MS72 Advances in Methods for Derivative-Free Optimization - Part I of III

Junior Ballroom B - Third Floor North Tower

MS73 Algorithms at the Intersection of Nonlinear, Stochastic, and Mixed-Integer Optimization - Part I of II

Junior Ballroom C - Third Floor North Tower

MS74 Nonlinear Optimization: Scalability and Tractability of Methods - Part I of III

Junior Ballroom D - Third Floor North Tower

MS75 Optimizing Big Data: Acceleration, Randomization, and Parallelism - Part I of III

Parksville - Third Floor North Tower

MS76 Convexifications in Mixed Integer Nonlinear Optimization

Orca - Third Floor B Tower

MS77 Nonsmooth and Multiobjective Optimization with Applications - Part I of III

Finback - Third Floor B Tower

MS78 Majorization/Minimization Algorithms in Statistics and Optimization - Part I of II

Beluga - Third Floor B Tower

MS79 Distributionally Robust Optimization: Theory and Applications

Azure - Third Floor South Tower

MS80 Nonconvex Optimization in Data Analysis - Part III of III

Gulf Islands B - Lower Lobby North Tower

MS81 Making Machine Learning work with Big Datasets and Complicated Objectives - Part I of II

Gulf Islands C - Lower Lobby North Tower

11:30 AM - 1:00 PM

Lunch Break

Attendees on their own

1:00 PM - 1:45 PM

IP5 Using Second-order Information in Training Large-scale Machine Learning Models

Katya Scheinberg, Lehigh University, USA

Grand Ballroom AB - North Tower

1:45 PM - 2:00 PM

Intermission

2:00 PM - 4:00 PM

Concurrent Sessions

MS82 Robustness and Dynamics in Optimization - Part II of III

Grand Ballroom AB - North Tower

MS83 Conic Programming: Theoretical Aspects and Applications

Pavilion Ballroom A - Third Floor North Tower

MS84 Geometry, Duality, and Complexity in Convex Optimization - Part II of II

Pavilion Ballroom B - Third Floor North Tower

MS85 Computation, Learning and Uncertainty in PDE Constrained Optimization Models - Part II of II

Pavilion Ballroom C - Third Floor North Tower

MS86 First-order Methods and Applications - Part II of III

Pavilion Ballroom D - Third Floor North Tower

MS87 Smoothing and Regularization Techniques in Optimization - Part II of II

Junior Ballroom A - Third Floor North Tower

MS88 Advances in Methods for Derivative-Free Optimization - Part II of III

Junior Ballroom B - Third Floor North Tower

MS89 Algorithms at the Intersection of Nonlinear, Stochastic, and Mixed-Integer Optimization - Part II of II

Junior Ballroom C - Third Floor North Tower

MS90 Nonlinear Optimization: Scalability and Tractability of Methods - Part II of III

Junior Ballroom D - Third Floor North Tower

MS91 Optimizing Big Data: Acceleration, Randomization, and Parallelism - Part II of III

Parksville - Third Floor North Tower

MS92 Continuous Techniques for MINLPs with Differential Equations in Gas Transport

Orca - Third Floor B Tower

MS93 Nonsmooth and Multiobjective Optimization with Applications - Part II of III

Finback - Third Floor B Tower

2017 SIAM Conference on Optimization At-A-Glance

Wednesday, May 24

MS94 Majorization/Minimization Algorithms in Statistics and Optimization - Part II of II
Beluga - Third Floor B Tower

MS95 Optimization and Quantum Chemistry

Azure - Third Floor South Tower

MS96 Large Scale Optimization in Big Data

Gulf Islands B - Lower Lobby North Tower

MS97 Making Machine Learning work with Big Datasets and Complicated Objectives - Part II of II

Gulf Islands C - Lower Lobby North Tower

.....
4:00 PM - 4:30 PM

Coffee Break

Grand Ballroom CD - North Tower



.....
4:30 PM - 6:30 PM

Concurrent Sessions

MS98 Robustness and Dynamics in Optimization - Part III of III

Grand Ballroom AB - North Tower

MS99 First-order Methods and Applications - Part III of III

Pavilion Ballroom D - Third Floor North Tower

MS100 Advances in Methods for Derivative-Free Optimization - Part III of III

Junior Ballroom B - Third Floor North Tower

MS101 Nonlinear Optimization: Scalability and Tractability of Methods - Part III of III

Junior Ballroom D - Third Floor North Tower

MS102 Optimizing Big Data: Acceleration, Randomization, and Parallelism - Part III of III

Parksville - Third Floor North Tower

MS103 Nonsmooth and Multiobjective Optimization with Applications - Part III of III

Finback - Third Floor B Tower

CP12 Stochastic Optimization and Applications - Part II

Pavilion Ballroom A - Third Floor North Tower

CP13 Sparse Optimization

Pavilion Ballroom B - Third Floor North Tower

CP14 Engineering Applications

Pavilion Ballroom C - Third Floor North Tower

CP15 Conic Optimization

Junior Ballroom A - Third Floor North Tower

CP16 Convex Optimization

Junior Ballroom C - Third Floor North Tower

CP17 Nonlinear Optimization - Part II

Orca - Third Floor B Tower

Wednesday, May 24

CP18 Integer and Combinatorial Optimization - Part I

Beluga - Third Floor B Tower

CP19 Nonlinear Optimization - Part III

Azure - Third Floor South Tower

CP20 Integer and Combinatorial Optimization - Part II

Gulf Islands B - Lower Lobby North Tower

CP21 Polynomial Optimization

Gulf Islands C - Lower Lobby North Tower

Thursday, May 25

.....
7:45 AM - 2:45 PM

Registration

Grand Ballroom Foyer - North Tower

.....
8:10 AM - 8:15 AM

Closing Remarks

Grand Ballroom AB - North Tower

.....
8:15 AM - 9:00 AM

IP6 Using Local Measurements to Infer Global Network Properties

Ali Pinar, Sandia National Laboratories, USA

Grand Ballroom AB - North Tower

.....
9:00 AM - 9:30 AM

Coffee Break

Grand Ballroom CD - North Tower



.....
9:30 AM - 11:30 AM

Concurrent Sessions

MS104 Convex Optimization and Quadratic Programming

Grand Ballroom AB - North Tower

MS105 Conic Optimization and Quantum Information Theory - Part I of II

Pavilion Ballroom A - Third Floor North Tower

MS106 Nonlinear Optimization: Methods and Applications - Part I of II

Pavilion Ballroom B - Third Floor North Tower

MS107 PDE-constrained Optimization Under Uncertainty

Pavilion Ballroom C - Third Floor North Tower

MS108 New Results for First-Order Methods for Convex Optimization

Pavilion Ballroom D - Third Floor North Tower

Tower

Thursday, May 25

MS109 Optimization in Disease Treatment

Junior Ballroom A - Third Floor North Tower

MS110 Nonsmooth Derivative-Free Optimization

Junior Ballroom B - Third Floor North Tower

MS111 Optimization with Balance Laws on Graphs

Junior Ballroom C - Third Floor North Tower

MS112 Non-convex Optimization for Low Complexity Models: Theory and Applications - Part I of II

Junior Ballroom D - Third Floor North Tower

MS113 Multistage Stochastic Programming Algorithms and Bounding Methods

Parksville - Third Floor North Tower

MS114 Mixed-Integer PDE-Constrained Optimization - Part I of II

Orca - Third Floor B Tower

MS115 Numerical Variational Analysis - Part I of II

Finback - Third Floor B Tower

MS116 Nonconvex Optimization Problems in Learning

Beluga - Third Floor B Tower

MS117 Relationship Between Optimization and Quantum Computation - Part I of II

Azure - Third Floor South Tower

MS118 Proximal Techniques for High-dimensional Statistics - Part I of II

Gulf Islands B - Lower Lobby North Tower

MS119 Modern Frank-Wolfe Optimization and Applications - Part I of II

Gulf Islands C - Lower Lobby North Tower

.....
11:30 AM - 1:00 PM

Lunch Break

Attendees on their own

.....
1:00 PM - 1:45 PM

IP7 Recent Progress on Dual Decomposition for Stochastic Integer Programming

Jeffrey Linderoth, University of Wisconsin, Madison, USA

Grand Ballroom AB - North Tower

.....
1:45 PM - 2:15 PM

Coffee Break

Grand Ballroom CD - North Tower



.....
2:15 PM - 4:15 PM

Concurrent Sessions

MS120 Conic Optimization and Quantum Information Theory - Part II of II

Pavilion Ballroom A - Third Floor North Tower

2017 SIAM Conference on Optimization At-A-Glance

Thursday, May 25

MS121 Nonlinear Optimization: Methods and Applications - Part II of II

Pavilion Ballroom B - Third Floor North Tower

MS122 Recent Trends in PDE-Constrained Optimization

Pavilion Ballroom C - Third Floor North Tower

MS123 New Perspectives on Convergence Acceleration

Pavilion Ballroom D - Third Floor North Tower

MS124 Optimization Methods for Spatiotemporal Modulation of Radiotherapy Treatment Plans

Junior Ballroom A -Third Floor North Tower

MS125 Parallel Algorithms for Stochastic Programming

Junior Ballroom B -Third Floor North Tower

MS126 Algebraic and Variational Approaches to Problems on Graphs

Junior Ballroom C -Third Floor North Tower

MS127 Non-convex Optimization for Low Complexity Models: Theory and Applications - Part II of II

Junior Ballroom D -Third Floor North Tower

MS128 Complexity and Optimal Algorithms for Large Scale Optimization Problems

Parksville - Third Floor North Tower

MS129 Mixed-Integer PDE-Constrained Optimization - Part II of II

Orca - Third Floor B Tower

MS130 Numerical Variational Analysis - Part II of II

Finback - Third Floor B Tower

MS131 Geometric Structures in Optimization

Beluga - Third Floor B Tower

MS132 Relationship Between Optimization and Quantum Computation - Part II of II

Azure - Third Floor South Tower

MS133 Proximal Techniques for High-dimensional Statistics - Part II of II

Gulf Islands B - Lower Lobby North Tower

MS134 Modern Frank-Wolfe Optimization and Applications - Part II of II

Gulf Islands C - Lower Lobby North Tower

Key to abbreviations and symbols

CP = Contributed Presentation

IP = Invited Plenary Speaker

SP = Special Lecture

MS = Minisymposium

MT = Minitutorial



= Business Meeting



= Coffee Break



= Poster Session

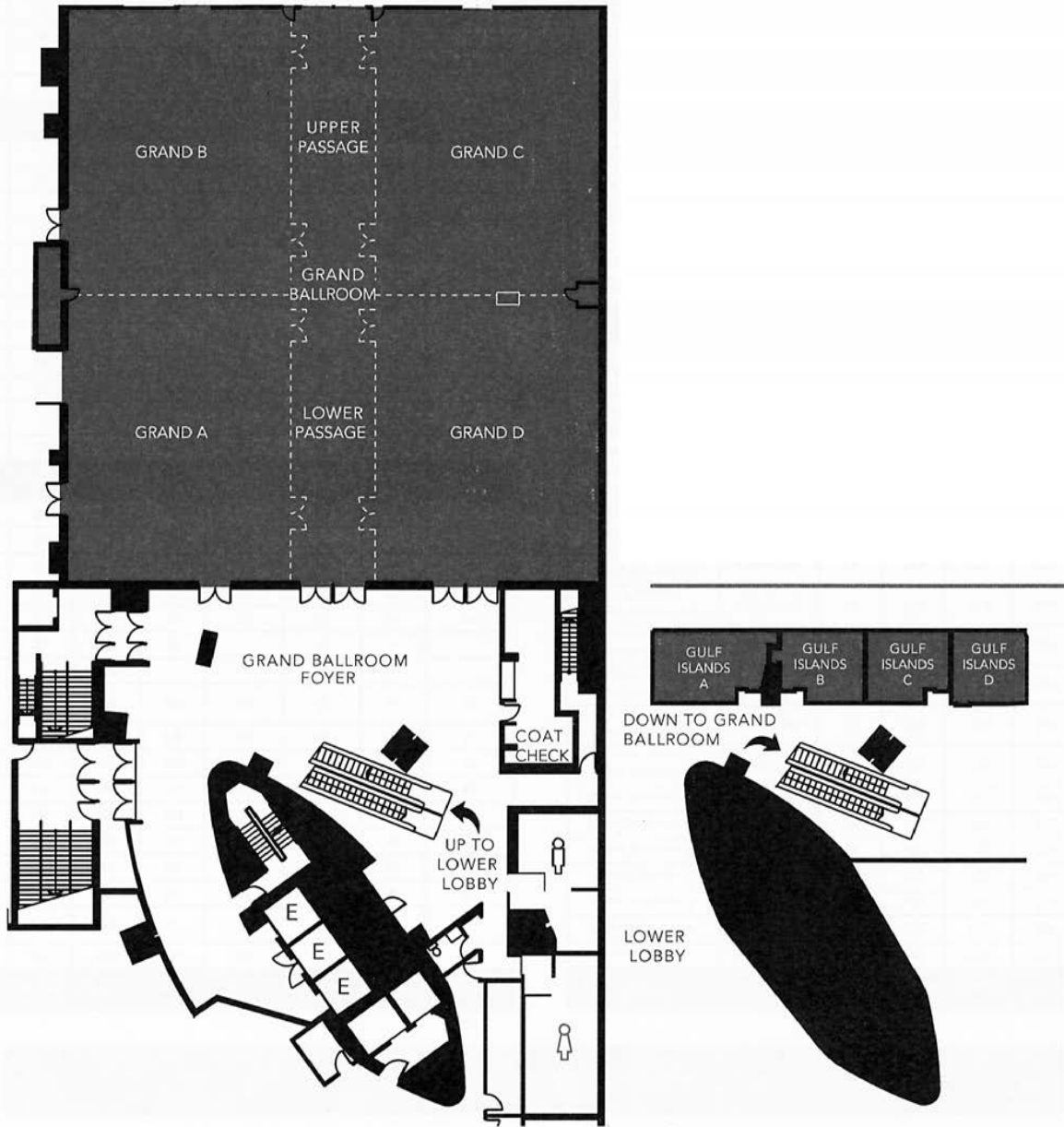


= Refreshments Served

Sheraton Vancouver Wall Center Floor Plan

NORTH TOWER

GRAND BALLROOM



Sheraton Vancouver Wall Center Floor Plan

