

Optimization Workshop 2024

Universidad de los Andes

December 9th
Monday

Event		Location
7:30 - 7:50 AM	Check-in	Building B - Room 202
7:50 - 8:00 AM	Opening	
8:00 - 10:00 AM	Mateo Díaz: Introduction to Continuous Optimization	
10:00 - 10:30 AM	Coffee Break	
10:30 - 12:30	Justin Goodson: Stochastic Dynamic Programming	
12:30 - 2:00PM	Lunch Break	
2:00 - 4:00 PM	José Walteros: Introduction to Integer Optimization	
4:00 - 4:30 PM	Coffee Break	
4:30 AM - 5:30 PM	Panel: Applying to gradschool and life in academia	

December 10th

Event			Location
8:00 - 8:30 AM	Check-in		Building B - Room 202
8:30 - 9:00 AM	Welcome remarks		
9:00 - 10:00 AM	Claudia Sagastizábal: Industrial Mathematics in Action: Full Wave Inversion	KEYNOTE	
10:00 - 10:30 AM	Coffee Break		
10:30 - 11:10 AM	Computational Optimization at Google	Daniel Duque	
11:10 - 11:50 AM	The Role of Level-Set Geometry on the Performance of PDHG for Conic Convex Optimization	Robert Freund	
11:50 AM - 1:30 PM	Lunch Break		
1:30 - 2:10 PM	Data-driven bilevel optimization for inverse problems	Juan Carlos De los Reyes	
2:10 - 2:50 PM	Decision Diagram based approaches for discrete bilevel programming	Leonardo Lozano	
2:50 - 3:20 PM	Coffee Break		
3:20 - 4:00 PM	A Parametric Approach for Solving Convex Quadratic Optimization with Indicators Over Trees	Salar Fattahi	
4:00 - 6:00 PM	Posters / Cocktail		Building SD 7th Floor

December 11th

Event		Location
8:30 - 9:00 AM	Check-in	Building B - Room 202
9:00 - 10:00 AM	Stephen Wright: Revisiting Inexact Fixed-Point Iterations for Min-Max Problems: Stochasticity and Structured Nonconvexity	
10:00 - 10:30 AM	Coffee Break	
10:30 - 11:10 AM	TBD	
11:10 - 11:50 AM	On Graphs with Finite-Time Consensus	
11:50 AM - 1:30 PM	Lunch Break	
1:30 - 2:10 PM	Rounding the Lovász Theta Function with a Value Function Approximation	
2:10 - 2:50 PM	Non-SOS Polynomial Optimization via a Lifting procedure	
2:50 - 3:20 PM	Coffee Break	
3:20 - 4:00 PM	Partially Adaptive Multistage Stochastic Programming with Formulations, Algorithms, and Applications	
4:00 - 4:40 PM	TBD	Origen Bistro
6:00 - 8:00 PM	Dinner	

December 12th

Event		Location
8:30 - 9:00 AM	Check-in	Building B - Room 202
9:00 - 10:00 AM	Simge Küçükyavuz: Convex Mixed-Integer Optimization for Causal Discovery	
10:00 - 10:30 AM	Coffee Break	
10:30 - 11:10 AM	Contextualizing, Fast and Slow	
11:10 - 11:50 AM	Problem-based clustering and opportunity cost matrices in stochastic programming	
11:50 AM - 1:30 PM	Lunch Break	
1:30 - 2:10 PM	Variational Theory and Algorithms for a Class of Asymptotically Approachable Nonconvex Problems	
2:10 - 2:50 PM	Non-Convex Semi-Infinite Programming: From discretization to local reduction methods	
2:50 - 3:20 PM	Coffee Break	
3:20 - 4:00 PM	Some ideas for convex optimization using quantum computers	
4:00 - 4:40 PM	TBD	

December 13th

Time	Event		Location
8:30 - 9:00 AM	Check-in		Building B - Room 202
9:00 - 10:00 AM	Andrés Medaglia: Leveraging shortest-path structures for engineering solutions	KEYNOTE	
10:00 - 10:30 AM	Coffee Break		
10:30 - 11:10 AM	Outlier Robustness via Partial Optimal Transport	Soroosh Shafiee	
11:10 - 11:50 AM	A tractable algorithm, based on optimal transport, for computing adversarial training lower bounds	Nicolás García Trillos	
11:50 AM - 1:30 PM	Lunch Break		
1:30 - 2:10 PM	Adversarial robustness for stochastic programs through decision-dependent ambiguity sets	Mauricio Junca	
2:10 - 2:50 PM	Projection onto Cones Generated by Epigraphs of Perspective Functions	Luis Briceño Arias	
2:50 - 3:20 PM	Coffee Break		
3:20 - 4:00 PM	Proximal Splitting Methods Through the Lenses of Moreau-type Envelopes	Felipe Atenas	
4:00 - 4:40 PM	TBD	Ashwin Pananjady	
4:40 - 5:00 AM	Closing remarks		