

# LACIAM 2023 Program

	January 30st, 2023	January 31st, 2023	February 1st, 2023	February 2nd, 2023		February 3rd, 2023
	Monday	Tuesday	Wednesday	Thursday		Friday
7:30 - 8:10	Registration					
8:10 - 8:30	Opening (Cultural Center)					
08:30 - 09:15	<b>Susana Gómez Gómez</b> Complex Applications of Industry and Environment for Global Optimization <b>Cultural Center</b>	<b>André Luiz Diniz</b> Modelling of nonlinear/nonconvex aspects in SDDP algorithms: experience in the official models applied to the energy planning of the large-scale Brazilian system <b>Cultural Center</b>	<b>Alberto Paccanaro</b> Machine learning algorithms for making inferences on networks and answering questions in biology, medicine and pharmacology <b>Cultural Center</b>	<b>Claudia d'Ambrosio</b> Mathematical Optimization for Urban Air Mobility <b>Cultural Center</b>	08:30-10:10	<b>Thematic Session:</b> IM (317) -> 08:30 CFM 2 (308) -> 08:55 BIO 5 (307) -> 09:20
09:15 - 10:00	<b>Juan Carlos De Los Reyes</b> Bilevel learning for inverse problems <b>Cultural Center</b>	<b>Ruben Daniel Spies</b> Diffusion in inverse problems and inverse problems in diffusion <b>Cultural Center</b>	<b>Maya Stein</b> Graph theory: Forbidden subgraphs, Colourings and Applications <b>Cultural Center</b>	<b>José Luis Aragón</b> Vera Pattern formation in Turing systems with space varying diffusion <b>Cultural Center</b>		
10:00 - 10:30	<b>Coffee Break</b> <b>Cultural Center</b>	<b>Coffee Break</b> <b>Cultural Center</b>	<b>10:00 - 10:50: Coffee Break</b> <b>Poster Session 1</b> <b>Cultural Center</b>	<b>Coffee Break</b> <b>Cultural Center</b>	10:10 - 11:00	<b>Coffee Break</b> <b>Poster Session 2</b> <b>Cultural Center</b>
10:30 - 12:10	<b>Thematic Sessions:</b> BIO 1 (307) CPDE 1 (308) MFG 1 (317) NR 1 (318)	<b>Minicourse Christian Vergara</b> Numerical solution of coupled problems in the cardiovascular field <b>Cultural Center</b> <b>Thematic Sessions:</b> MFG 2 (307) SP 1 (308)	<b>10:50 - 12:30</b> <b>Thematic Sessions:</b> BIO 3 (307) CFM 1 (308) CPDE 2 (317) NR 2 (318)	<b>Minicourse Christian Vergara</b> Numerical solution of coupled problems in the cardiovascular field <b>Cultural Center</b> <b>Thematic Sessions:</b> MFG 3 (307) SP 2 (308)	11:00 - 11:45	<b>Soledad Villar</b> Machine learning that obeys physical law <b>Cultural Center</b>
12:10 - 13:40	<b>Lunch</b>	<b>Lunch</b>	<b>12:30 - 13:15</b> <b>Quick lunch (offered by FGV)</b> <b>Cultural Center</b>	<b>Lunch</b>	11:45 - 13:00	<b>Alvaro Riascos Villegas</b> Mathematical Models of Crime: Prediction, Discrimination, Interpretability and Equilibrium <b>Poster awards &amp; Closure</b> <b>Cultural Center</b>
13:40 - 15:20	<b>Thematic Sessions:</b> ML 1 (307) OC 1 (308) SDE 1 (317)	<b>Thematic Sessions:</b> ML 2 (307) OC 2 (308) SDE 2 (317)	<b>13:15 - 14:00: Wil Schilders</b> Mathematics: key enabling technology for scientific machine learning <b>Cultural Center</b>	<b>Thematic Sessions:</b> FM 2 (307) OC 3 (308) RC 2 (317)		
15:20 - 15:50	<b>Coffee Break</b> <b>Cultural Center</b>	<b>Coffee Break</b> <b>Cultural Center</b>		<b>Coffee Break</b> <b>Cultural Center</b>		
15:50 - 17:30	<b>Thematic Sessions:</b> FM 1 (307) IP (308) RC 1 (317)	<b>Minicourse Ana da Silva</b> Graph Coloring Theory and Application <b>Cultural Center</b> <b>Thematic Sessions:</b> BIO 2 (307) NPDEOPT (308)		<b>Minicourse Ana da Silva</b> Graph Coloring Theory and Application <b>Cultural Center</b> <b>Thematic Session:</b> BIO 4 (307)		
17:40 - 18:40	<b>Panel discussion:</b> New Challenges in the Modern Industrial Mathematics <b>Cultural Center</b>	<b>Panel discussion:</b> Policies focusing on Gender Equality in Applied Math across LATAM Countries <b>Cultural Center</b>				
18:40 - 20:40	<b>Cocktail</b> <b>Cultural Center</b>			<b>19:30: Social Dinner</b>		

\*The value in parentheses shows the room in which the Thematic Session will occur. All of them are on the 3rd floor. You should use the access card.

Room 306: co-working space, available from 8am to 6pm

THEMATICS SESSIONS (TS)
BIO: Biomathematics
CFM: Novel Computational Methods for Coupled and Non-linear Problems Arising in Complex Fluid Mechanics
CPDE: Control and Stabilization for Partial Differential Equations
FM: Financial Mathematics
IM: Industrial Mathematics in Brazilian research centers
IP: Direct and Inverse Problems in Particle and Radiation Transport
MFG: New developments in Mean Field Games and Hamilton-Jacobi equations
ML: Mathematical Linguistics
NPDEOPT: Trends in numerical methods and approximation for PDE-constrained optimization
NR: Mathematical methods in Network Reliability
OC: Optimal control theory and applications
RC: Mathematical foundations of robot control
SDE: Recent contributions in stochastic differential equations
SP: Special topics in stochastic processes, random structures, and applications