# 4th Workshop on Statistical Physics

# **Thursday 05 October 2023**

# <u>Invited Talks</u> - A1 - edificio 564 (9:00-10:00)

#### -Moderadores: Gabriel Téllez

time	[id] title presenter		
9:00	[13] Exploring the glassy dynamics of the Gaussian core model	Dr CAMARGO, Manuel	
9:20	[18] Exploration mechanisms intrinsic to semantic networks and the nuanced appraisal of lexical repetition occurrences	Dr NARANJO MAYORGA, Fernando	
9:40	[39] Citizen environmental governance: reconstructing through network analysis the dynamics of the social movement in the Páramo de Santurbán	Dr VILLALOBOS, Gabriel	

# **Invited Talks** - A1 - edificio 564 (10:30-11:10)

#### -Moderadores: Gabriel Villalobos

time	[id] title	presenter	
10:30	[30] Distinguishability versus Indistinguishability of Agents in Metapopulation Epidemic Models	Prof. GÓMEZ GARDEÑES, Jesús	
10:50	[7] Statistical mechanics of the exchange kinetic models associated with additive and multiplicative stochastic processes	Prof. QUIMBAY HERRERA, Carlos José	

# Invited Talks - A1 - edificio 564 (14:00-15:20)

#### -Moderadores: Fernando Naranjo Mayorga

time	e [id] title presenter	
	[29] How we move in the city: some results of the analysis of complex mobility networks	Dr LOTERO, Laura
14:20	[46] Urban traffic dynamics through the lens of percolation theory	Dr OLMOS, Luis Eduardo
	[15] Discrete-time random walks with stochastic restart on networks: when resetting becomes advantageous?	Dr PÉREZ RIASCOS, Alejandro
15:00	[16] Emergent properties of chess openings	Prof. HURTADO, Rafael

# Friday 06 October 2023

# Invited Talks: Invited talks - A1 - edificio 564 (9:00-9:40)

#### -Moderadores: Juan Gabriel Ramirez

time	le presenter	
9:00	[21] Numerical integration of a class of stochastic differential equations with singular coefficients	Dr ANDRAUS, Sergio
9:20	[10] One-particle engine with a porous piston	Dr ALVAREZ, Carlos

### Invited Talks: Invited talks - A1 - edificio 564 (10:30-10:50)

#### -Moderadores: Jose Daniel Muñoz Castaño

time [id] title	presenter
10:30 [3] Physical properties driven by phase separation in materials: percolation and avalanches.	n electron-correlated Prof. RAMIREZ, Juan Gabriel

# Invited Talks: Invited talks - A1 - edificio 564 (11:30-12:10)

#### -Moderadores: Jose Daniel Muñoz Castaño

time	e [id] title	presenter
11:3	[55] Frustration effects on the magnetic behavior of the Fe\$_{(73.5-x)}\$  Cr\$_{(x)}\$ Cu\$_1\$ Nb\$_3\$ Si\$_{13.5}\$ B\$_9\$ system on the road to percolation	Prof. ROSALES RIVERA, Andrés
11:5	[12] Comparative Analysis of Surface Charge Density in Planar Metallic Layers: Molecular Dynamics and Method of Moments Approach for Long-Range Interactions	Dr SALAZAR, Robert

# Invited Talks: Invited talks - A1 - edificio 564 (14:40-15:00)

#### -Moderadores: Robert Salazar

1	time [id] title	presenter
	14:40 [38] Work and heat in weakly measured quantum systems: 7 measure matters.	The way you Prof. VIVIESCAS, Carlos

# Invited Talks - A1 - edificio 564 (16:00-17:40)

#### -Moderadores: Carlos Viviescas

time (id) title	presenter
16:00 [32] Beyond molecular kinetics: statistical physics methods in systems bid	ology Prof. PEDRAZA, Juan Manuel
16:20 [53] Bayesian analysis of free energies using Cryo-EM particle images	Dr COSSIO, Pilar
16:40 [52] Explaining the complexity of Colombian climate from the non-extensi extremal behavior	rive Prof. HOYOS, Isabel Cristina
17:00 [54] Determination of the free energy landscape of ultrasmall silver cluste metadynamics and machine learning techniques	ers with Prof. LÓPEZ-ACEVEDO, Olga

17:20	[23] Steady state of a two-species annihilation process with separated reactants	
		Luis