Workshop: "Mathematics and Applications"

CIMA-UÉvora and CIMPA-UCR are coorganizing the first hybrid Workshop "Mathematics and Applications" on January 25th-27th from 8am to 12 md. Its main objective is to offer an academic space for sharing ideas and to establish possible collaborations among researchers in CIMA and CIMPA.

Place: CIMPA-UCR, San Pedro de Montes de Oca, Costa Rica and also by Zoom

Algebra and Geometry

CIMA: Zé Carlos Oliveira, Fátima Pereira, Manuel Branco, Pedro Marques, Rui Albuquerque
CIMPA: Alberto Hernández, Ronald Zúñiga, Roberto Ulloa, Santiago Chaves

Logic and Topology

CIMA: Bruno Dinis
CIMPA: Oscar Zamora

Analysis and Probability

CIMA: Carlos Braumann, Elvira Zappale, Gonçalo Jacinto
CIMPA: Luis Guillermo Acuña, Adriana Sánchez

Differential Equation and Optimization

CIMA: Feliz Minhós, Marília Pires, Fernando Carapau
CIMPA: Fabio Sanchez

Statistics

CIMA: Ligia Henriques-Rodrigues, Jorge Santos, Russell Alpizar-Jara, Luis Grilo
CIMPA: Mario Villalobos, Maikol Solís, Oldemar Rodríguez

Workshop "Mathematics and Applications"
January 25th-27th, 2023

CR TIME: https://udecr.zoom.us/j/87324467238?pwd=Q3VoWDZLcnpicUpROWVodTRwYUlrUT09
ID de reunión: 873 2446 7238 / Código de acceso: WORKSHOP

Start	End		Wednesday 25th				Thursday 26th				Friday 27th		
8:00 a. m.	8:20 a. m.		Opening Ceremony				Manuel Baptista Branco	A/G	Numerical semigroups with fixed multiplicity and concentration		Carlos Alberto dos Santos Braumann	A/P	SDE harvesting models in random environments: The effect of Allee effects, model robust properties and profit optimization
8:20 a. m.	8:40 a. m.		Feliz Manuel Barrão Minhós	DE/O	Coupled systems of fully simply supported beam equations		Santiago Chaves Aguilar	A/G	Geometric Representation Theory		Gonçalo Jacinto	A/P	Individual growth models with stochastic differential equations
8:40 a. m.	9:00 a. m.		Fabio Sanchez Peña	DE/O	Adaptive Human Behavior in Mathematical Models		Rui Albuquerque	A/G	G_2-twistor space applied to the study of vector fields		Lígia Henriques-Rodrigues	S	Recent contributions in the semi-parametric es- timation of parameters of extreme events
9:00 a. m.	9:20 a. m.		Fernando M. Lucas Carapau	DE/O	Numerical simulations of a third-grade fluid flow on a tube through a contraction		Pedro Macias Marques	A/G	Jordan type of local Artinian Gorenstein algebras		Mario Villalobos Arias	S	Curve Fitting for pandemic data using Generalized Logistic Regression
9:20 a. m.	9:40 a. m.		Marília da Conceição Valente de Oliveira Pires	DE/O	Artificial Stress Diffusion Applied to the Simulations of Oldroyd-B Fluid Flows		Alberto Hernández Alvarado	A/G	Minimum depth of factorization algebras		Oldemar Rodríguez Rojas	S	Pendiente
9:40 a. m.	10:00 a. m.		Questions / Answers										
10:00 a. m.	10:20 a. m.		Break										
10:20 a. m.	10:40 a. m.		Elvira Zappale	DE/O	Lower semicontinuity of non local supremal functionals		Bruno Miguel Antunes Dinis	L/T	Recent advances in proof mining		Maikol Solís Chacón	S	Geometric goodness of fit measure to detect patterns in data point clouds
10:40 a. m.	11:00 a. m.		Fátima M. Filipe Pereira	A/G	Directional curvatures of compact convex sets in Rn		Oscar Zamora Luna	L/T	The Maximum Number of Pentagons in a Planar Graph		Jorge M. Azevedo Santos	S	Aproximations to the binomial distribution, its bounds, relative and absolute precision
11:00 a. m.	11:20 a. m.		Adriana Sánchez Chavarría	A/P	Continuity problem of Lyapunov exponents		Ronald Zúñiga Rojas	A/G	Variations of Hodge Structures of Rank 3 k-Higgs Bundles and Moduli Spaces of Holomorphic Triples		Luis Grilo	S	PLSc-SEM to assess college students' burnout with optimism and stress as predictors
11:20 a. m.	11:40 a. m.		Luis G. Acuña Valverde	A/P	Pendiente		Roberto Ulloa Esquivel	A/G	Multiplicities of modules		Russell Alpízar-Jara	S	Distributional properties of the Lincoln-Petersen-like estimators under low recapture values
11:40 a. m.	12:00 md		Questions / Answers				José Carlos Tiago de Oliveira	A/G	Maths, Philosophy, Anthropology - 3 ocean Sykes-Picot		Questions / Answers		
12:00 md	12:20 md						Questions / Answers				Closing Ceremony		

Virtual by Zoom

On site (Also by Zoom)

DE/O: Differential Equations and Optimization
A/P: Analysis and Probability
A/G: Algebra and Geometry
L/T: Logic and Topology
S: Statistics

UNIVERSIDAD DE COSTA RICA

CIMPA — Centro de Investigación en Matemática Pura y Aplicada

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