# XVI ENCONTRO NACIONAL DE ANÁLISE MATEMÁTICA E APLICAÇÕES
## 08 a 10 de NOVEMBRO de 2023
## IM-UFAL

| PROGRAMAÇÃO ENAMA (2023) | | | |
|---|---|---|---|
| HORÁRIO | 08/11/2023 - QUARTA-FEIRA | 09/11/2023 – QUINTA-FEIRA | 10/11/2023 – SEXTA-FEIRA |
| **Minicursos** Aud. Vera Rocha | **Abertura (09:00-09:30)** | **Gustavo Hoepfner (08:30-09:10)** | **Gustavo Hoepfner (08:30-09:10)** |
| | **Gustavo Hoepfner (09:30-10:00)** | **Regilene Oliveira (09:10-09:50)** | **Regilene Oliveira (09:10-09:50)** |
| | **Wladimir Neves (10:00-10:30)** | **Wladimir Neves (09:50-10:30)** | **Wladimir Neves (09:50-10:30)** |
| 10:30-11:00 | Intervalo | Intervalo | **Postêres (10:30-11:00)** |
| **Conferências** Aud. Vera Rocha | **Regilene Oliveira (11:00-11:30)** | **Cristina Brech (11:00-11:50)** | |
| | **Adán Corcho (11:30-12:20)** | **Daniela Buske (11:50-12:40)** | |
| **12:20-14:10** | ALMOÇO (12:20-14:10) | ALMOÇO (12:40-14:10) | ALMOÇO (12:00-14:30) |
| **14:10-16:30 Comunicações Orais** | **Elíptica I** | **Elíptica II** | **Diego Moreira (14:30-15:20)** Auditório Vera Rocha |
| | **Evolução I** | **Evolução III** | **Encerramento (15:30-16:00)** |
| | **EDO/EDF/EDI I** | **Análise II** | |
| 16:30-17:00 | Intervalo | Intervalo | |
| **17:00-19:00 Comunicações Orais** | **Análise I** | **Elíptica III** | |
| | **Evolução II** | **Evolução IV** | |
| | **EDO/EDF/EDI II ANÁLISE NUMÉRICA** | **Análise III** | |

Títulos e resumos das conferências e dos minicursos estão no link http://www.enama.org/?page_id=2407
- As atividades no período da manhã (conferências, minicuros e sessões de postêres) vão acontecer no **Auditório Vera Rocha,** no IFC (Instituto de Ciências Farmacêuticas) da UFAL.
- A programação da tarde acontecerá em **salas do Instituto de Matemática (IM)**.

| Quarta-feira – 08 de novembro de 2023 IM-UFAL (14:10-16:30) | |
|---|---|
| **Sala 106 do IM-Novo (EDP-Elíptica I)** | **Sala da Pós-Graduação do IM-Velho (EDP-Evolução I)** |
| **Uberlâdio Severo (coordenador)** | **Haroldo Clark (coordenador)** |
| **14:10 – 14:30** **Bráulio B. V. Maia,** Some asymmetric semilinear elliptic interface problems | **Abiel C. Macedo**, Estimate for concentration level of the Adams functional and extremals for Adams-type inequality |
| **14:30 – 14:50** **Edcarlos D. Silva,** Quasilinear elliptic problems with general concave-convex nonlinearities | **Alysson Cunha**, On uniqueness results for solutions of the Benjamin equation |
| **14:50 – 15:10** **Eudes Barboza,** Elliptic systems of Hénon type involving one-sided critical growth | **Carlos Alberto Raposo**, A model of suspension bridge in laminated beams |
| **15:10 – 15:30** **Grey Ercole,** The Cheeger constant as limit of Sobolev-type constants | **Gleiciane S. Aragão**, Asymptotic behavior of parabolic problems with nonlinear boundary conditions and varying boundaries |
| **15:30 – 15:50** **Marcos L. M. Carvalho,** Strong singular problem in nonreflexive fractional Orlicz-Sobolev space | **Islanita C. A. de Albuquerque**, Multi-objective control problems for parabolic system and KdV equation |
| **15:50 – 16:10** **Sandra I. Moreira,** Quasilinear elliptic problems with exponential growth via the Nehari manifold method: Existence of nonnegative and nodal solutions | **Luan S. de Sousa**, Control results with overdetermination condition for higher order dispersive system |
| **16:10 - 16:30** **Thiago Rodrigues Cavalcante,** Fractional $(p,q)-$ Laplacian operator in bounded domains | **Lucas A. Santos**, Fractional powers approach of operators for abstract evolution equations of third order in time |
| **16:30-17:00 Café – Praça entre oprédios do IM-novo e IM-velho** | |

| Quarta-Feira – 08 de novembro de 2023 IM-UFAL ( 14:10-16:30) |
|---|
| **Sala 3 do IM-novo (EDO-EDF-EDI I)** |
| **Everaldo Bonotto (coordenador)** |
| **14:10 – 14:30** **Jaqueline Mesquita**, Almost automorphic solutions of second-order equations involving time scales with boundary conditions |
| **14:30 – 14:50** **Eduard Toon**, Lyapunov techniques for integral equations in the sense of Kurzweil |
| **14:50– 15:10** **Marta Cilene Gadotti**, Analysis of a covid-19 model with delay |
| **15:10 – 15:30** **Márcia Richtielle da Silva**, Periodic solutions of measure functional differential equations |
| **15:30 – 15:50** **Anderson José de Oliveira**, Fuchsian differential equations and hyperbolic geometry in the C2,8 channel quantization |
| **15:50 – 16:10** **Paulo Ruffino**, Geometric aspects of Young Integral: decomposition of flows |
| **16:10 – 16:30** **Antônio M. A. Veloso dos Santos**, Persistency of Ito-Henstock SDEs with Levy noise on Hilbert spaces |
| **16:30-17:00 Café - Praça entre os prédios do IM-novo e IM-velho** |

| | Quarta-feira – 08 de novembro de 2023<br>IM-UFAL (17:00-19:00) | |
|---|---|---|
| | **Sala 106 do IM-Novo<br>(Análise I)** | **Sala da Pós-Graduação do IM-Velho<br>(EDP-Evolução II)** |
| | **Joedson Santos (coordenador)** | **Geraldo Araújo (coordenador)** |
| 17:00 –<br>17:20 | **Jamilson R. Campos**, Maximal ideals of generalized summing linear operators | **Arthur Cunha**, Smoothing and finite-dimensionality of uniform attractors in banach spaces |
| 17:20–<br>17:40 | **Luiz F. de P. Sousa**, Orlicz sequences and limited sets | **Félix Pedro Q. Gómez**, Asymptotic properties for a generalized plate equation under effects of rotational inertia and a logarithmic type dissipation |
| 17:40 –<br>18:00 | **Renato B. C. Macedo**, An anisotropic summability and mixed sequences | **Luciano C. da Silva**, Hierarchic control for the Burgers equation via Stackelberg-Nash strategy |
| 18:00 –<br>18:20 | **Vinícius Miranda**, Disjoint p-convergence of operators and adjoint operators | **Mirelle M. Sousa**, Global strong solutions for Navier-Stokes equations with density variable and mass diffusion in thin domains |
| 18:20 –<br>18:40 | **Thiago Grando**, The Bishop-Phelps-Bollobás theorem for lipschitz maps | **Mykael Cardoso**, Blow-up solutions for the inhomogeneous nonlinear Schrödinger equation |
| 18:40 –<br>19:00 | **Wilson Cuellar C.**, Local Banach-space dichotomies and ergodic spaces | **César Adolfo Hernández Melo**, Stability of equilibrium solutions of a logarithmic heat equation in commutative banach algebras |
| 19:00 –<br>19:20 | | **Brandon Carhuas De La Torre**, The Hardy parabolic problem with initial data in uniformly local Lebesgue spaces |

| | Quarta-Feira – 08 de novembro de 2023<br>IM-UFAL ( 17:00-19:00) |
|---|---|
| | **Sala 3 do IM-novo<br>(ED0-EDF-EDI II)** |
| | **Jaqueline Mesquita (coordenadora)** |
| 17:00 –<br>17:20 | **Everaldo Bonotto (USP)**, Attractors on impulsive dynamical systems |
| 17:20–<br>17:40 | **Pierluigi Benevieri (USP)**, Global bifurcation results for a delay differential system representing a chemostat model |
| 17:40 –<br>18:00 | **Fernanda de Andrade (USP),** Stability for generalized stochastic equations |
| 18:00 –<br>18:20 | |
| | **Sala 3 do IM-novo<br>(Análise Numérica)** |
| | **Sandra Malta (coordenadora)** |
| 18:20 –<br>18:40 | **Juarez S. Azevedo (UFBA),** The parameter inversion in coupled geomechanics using Bayesian inference |
| 18:40 –<br>19:00 | **Jean François (UECE)**, A Lagrangian-Eulerian approach for coupling hyperbolic-transport and elliptic Darcy-pressure-velocity equations in high-contrast porous media flow |
| 19:00 –<br>19:20 | **Hugo de La Cruz (FGV)**, An approach for solving stochastic differential equations with nonstandard coefficients |

| Quinta-feira – 09 de novembro de 2023 IM-UFAL (14:10-16:30) | |
|---|---|
| **Sala 106 do IM-Novo (EDP-Elíptica II)** | **Sala da Pós-Graduação do IM-Velho (EDP-Evolução III)** |
| **Edcarlos Silva (coordenador)** | **Haroldo Clark (coordenador)** |
| **Augusto C. R. Costa,** On a Neumann problem with discontinuous nonlinearities *(14:10 – 14:30)* | **Luis Friz**, The initialization problem for bioconvective flow |
| **Jônison Carvalho,** Quasilinear equation with critical exponential growth in the zero mass case *(14:30 – 14:50)* | **Marko A. Rojas-Medar**, Nonhomogeneous mhd equations: convergence of the semi-galerkin approximations |
| **J. Anderson V. Cardoso,** Some weighted Sobolev embedding involving functions that vanishing only in a direction and application *(14:50 – 15:10)* | **Miguel Loayza**, A singular parabolic equation with concave nonlinearity |
| **Uberlandio B. Severo,** Ground state solution for linearly coupled systems involving critical exponential growth *(15:10 – 15:30)* | **Joelma Azevedo**, On the Fractional Chemotaxis Navier-Stokes System in the Critical Spaces |
| **José Carlos de Albuquerque,** Schrödinger-Poisson system with zero mass in R2 involving (2,q)-Laplacian *(15:30 – 15:50)* | **Sônia Gomes (Unicamp)**, Enhanced and efficiente scale boundary finite elements for mechanical problems under the action of body loads |
| **Diego Ferraz,** Brezis-Kamin type results involving locally integrable weights *(15:50 – 16:10)* | **Charles Amorim**, Global existence of solutions for Boussinesq system with energy dissipation |
| *(16:10 - 16:30)* | **Bruno Sérgio V. Araújo**, Regularity results for degenerate wave equations in a neighborhood of the boundary |

| Horário | Sala 106 do IM-Novo (EDP-Elíptica II) | Sala da Pós-Graduação do IM-Velho (EDP-Evolução III) |
|---|---|---|
| **Edcarlos Silva (coordenador)** | | **Haroldo Clark (coordenador)** |
| 14:10 – 14:30 | **Augusto C. R. Costa,** On a Neumann problem with discontinuous nonlinearities | **Luis Friz**, The initialization problem for bioconvective flow |
| 14:30 – 14:50 | **Jônison Carvalho,** Quasilinear equation with critical exponential growth in the zero mass case | **Marko A. Rojas-Medar**, Nonhomogeneous mhd equations: convergence of the semi-galerkin approximations |
| 14:50 – 15:10 | **J. Anderson V. Cardoso,** Some weighted Sobolev embedding involving functions that vanishing only in a direction and application | **Miguel Loayza**, A singular parabolic equation with concave nonlinearity |
| 15:10 – 15:30 | **Uberlandio B. Severo,** Ground state solution for linearly coupled systems involving critical exponential growth | **Joelma Azevedo**, On the Fractional Chemotaxis Navier-Stokes System in the Critical Spaces |
| 15:30 – 15:50 | **José Carlos de Albuquerque,** Schrödinger-Poisson system with zero mass in R2 involving (2,q)-Laplacian | **Sônia Gomes (Unicamp)**, Enhanced and efficiente scale boundary finite elements for mechanical problems under the action of body loads |
| 15:50 – 16:10 | **Diego Ferraz,** Brezis-Kamin type results involving locally integrable weights | **Charles Amorim**, Global existence of solutions for Boussinesq system with energy dissipation |
| 16:10 - 16:30 | | **Bruno Sérgio V. Araújo**, Regularity results for degenerate wave equations in a neighborhood of the boundary |

**16:30-17:00 Café - Praça entre os prédios do IM-novo e IM-velho**

| Quinta-Feira – 09 de novembro de 2023 IM-UFAL ( 14:10-16:30) |
|---|
| **Sala 3 do IM-novo (Análise II)** |
| **Thaís Jordão (coordenadora)** |

| Horário | |
|---|---|
| 14:10 – 14:30 | **Vinícius V. Fávaro**, (Uniform) expansivity for operators on locally convex spaces |
| 14:30 – 14:50 | **Geivison dos S. Ribeiro**, General criteria for a stronger notion of lineability |
| 14:50 – 15:10 | **Lindinês C. da Silva**, A multipolynomial extension of the Kahane--Salem--Zygmund inequality |
| 15:10 – 15:30 | **Ariel dos S. Santiago**, Symmetric ideals of generalized summing multilinear operators |
| 15:30 – 15:50 | **José Lucas Pereira Luiz**, Grothendieck's compactness principle on Banach lattices |
| 15:50 – 16:10 | **Marcos Monteiro,** Sequence spaces related to bilinear applications |
| 16:10 - 16:30 | **Mikaela A. de Oliveira**, Lineability of sets of non-injective maps |

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| **Quinta-feira – 09 de novembro de 2023**<br>**IM-UFAL (17:00-19:00)** | | |

| | Sala 106 do IM-Novo<br>(EDP-Elíptica III) | Sala da Pós-Graduação do IM-Velho<br>(EDP-Evolução IV) |
|---|---|---|
| | **Sandra Moreira (coordenador)** | **Miguel Loayza (coordenador)** |
| 17:00 – 17:20 | **Mayra Soares**, Boundary weak harnack estimates and regularity for elliptic pde in divergence form | **Geraldo M. de Araújo,** On a navier-stokes-voigt system |
| 17:20 – 17:40 | **Ayana Pinheiro C. Santana,** Regularizing Effect for a Class of Maxwell-Schrödinger Systems | **Eugenio Cabanilla L**, Global solutions for a nonlinear degenerate nonlocal problem |
| 17:40 – 18:00 | **Gabriel Rodríguez V.** , A perturbed elliptic problem involving the p(x)-kirchhoff type triharmonic operator | **Eder Mateus**, On the fractional Navier-Stokes-Coriolis equation in Fourier-Besov-Morrey spaces |
| 18:00 – 18:20 | **Willy Barahona M,** A variational inequality with competing operators of p(x)-Kirchhoff type and convection term | **Jussara M. Moreira**, Higher-order asymptotic solutions for some Burgers equations |
| 18:20 – 18:40 | **Jesús Luque R.** , Existence of solutions for a quasilinear third-order boundary value problems | **Arlúcio Viana**, Global solutions for a fractional diffusion equation with gradient nonlinearity |
| 18:40 – 19:00 | | **Vando Narciso**, Attractors for a class of nonlocal energy plate model |
| 19:00 – 19:20 | | **Isadora M. de Jesus**, Massera's theorems for a higher order dispersive system |
| **Jantar por Adesão** | | |

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| **Quinta-Feira – 09 de novembro de 2023**<br>**IM-UFAL ( 17:00-19:00)** | |

| | Sala 3 do IM-novo<br>(Análise III) |
|---|---|
| | **Jamilson Campos (coordenador)** |
| 17:00 – 17:20 | **Thaís Jordão**, Approximation numbers of kernels satisfying an abstract Holder condition |
| 17:20– 17:40 | **Luis A. G. Santisteban**, Adjoints and second adjoints of almost Dunford-Pettis operators |
| 17:40 – 18:00 | **Michael A. Rincón Villamizar,** Copies of $\ell_\infty$ in the Banach space $\mathcal P_{w^*K}(^nX^*,Y)$ |
| 18:00 – 18:20 | **Rômulo Maia Vermersch**, Measure-theoretic uniformly positive entropy on the space of probability measures |
| 18:20 – 18:40 | **Orlando Stanley Juriaans**, Generalized geometry and transition probabilities |
| 18:40 – 19:00 | **Victor Dos Santos Ronchim,** Surjective isometries in the lorentz sequence spaces |
| **Jantar de Confraternização (por adesão)** | |

**Sexta-Feira, 10 de novembro de 2023**
**10:30-12:00**

## Análise
1. **Alexandre César Bispo Lima**, Factorization theorems for summing operators
2. **Antonio Araújo do Nascimento**, A convenient application of the multilinear theory to mid summing linear operators
3. **Bruna Zampieri Centurion**, Weighted norm inequalities for integral transforms of Fourier type (F-transforms)
4. **Daniel Galdino Simão**, Introduction to the theory of distribution
5. **Evândio Demétrio Júnior**, Basic sequences criteria on topological vector spaces
6. **Hermes Neto**, Universality limit for Stahl-Totik regular measures
7. **Juan David Rubio Tabares**, Weakly null sequences in $L_1[0,1]$

## Análise Numérica
1. **Daniel Morales**, Error analysis of the solutions of a nonlinear parabolic problem with terms concentrating in an oscillatory neighborhood of the boundary
2. **Martha P. Pulido**, A discretization of $\psi$-Riemann-Liouville fractional derivative
3. **Régis S. de Quadros**, Modeling cancer cell migration: temporal evolution of non-conserved field variables
4. **Luciano Magrini**, Correlation between COVID-19 cases and temperature in São Paulo city with wavelet analysis
5. **Daniela Buske**, Resolution of the linear system generated by applying the 3D-GILTT method in the transient three-dimensional advection-diffusion equation

## EDO-EDF-EDI
1. **Adriano Peixoto**, Existence of positive solution for a second-order nonlinear problem with mixed conditions

## EDP-Elípticas
1. **Eduardo D. Lima**, Existence and multiplicity of solutions for Kirchhoff problems via nonlinear Rayleigh quotient in $\mathbb{R}^N$
2. **Jefferson L.A. Oliveira**, Normalized solution for Schrödinger equations with $L^p$-subcritical and critical growth in $\mathbb{R}^N$
3. **Marlos Rodrigues Rocha**, Semilinear Elliptic Problems Via The Nonlinear Rayleigh Quotient With Two Nonlocal Nonlinearities
4. **Rodolfo Ferreira de Oliveira**, Infinitely many solutions for an elliptic equation with arbitrary growth in the upper-half space
5. **Artur Jorge Marinho**, Partial differential equations and (co)homolgy theory
6. **Hugo Henryque C. e Silva**, Morse theory and applications to a class of semilinear elliptic problems
7. **Ismael Oliveira**, Characterization of the Maximum Principle for linear second order elliptic operators with non-local term
8. **José Luando Santos**, Ground state solution for a linearly coupled stein-weiss system in R2
9. **Lázaro R.S. de Assis**, On fractional musielak-sobolev spaces and applications to nonlocal problems
10. **Marta Menezes**, Hamiltonian systems in the plane involving vanishing potentials
11. **Naisa Camila Garcia**, Extremal shape for eigenvalues of the Grushin laplacian
12. **Ronaldo L. da Silva**, On a elliptic problem involving the p(x)−laplacian and sobolev-hardy critical exponents
13. **Wanessa F. Tavares**, Spectral theory for the $\mathcal{L}_T$ Grushin operator

**EDP-Evolução**

1. **Antonio G. Leite**, Asymptotic behavior of the elastic wave equation with localized Kelvin-Voigt damping and memory effects
2. **Eric A. S. Santos**, Exact boundary controlabillity for the korteweg-de vries on bounded domains
3. **Ester Beatriz**, A Lyapunov function for fully nonlinear degenerate equations
4. **Jackellyny D. do N. Carvalho**, Stability and eigenvalue bounds for micropolar shear flows
5. **Daniela Buske**, Effect of soil retardation factor on a pollutant transport model
6. **Rafael O. de Jesus,** Strong stabilization for a Timoshenko beam system with internal fractional damping
7. **Roseane Martins**, Exponential stability of the von Kármán system with internal damping
8. **Leandro C. Araújo**, Suspension bridge with internal damping