Grupo de Equações Diferenciais Abstratas

1 Integrantes

1 Katia A. G. Azevedo
2 Maria Aparecida Bená

3 Jair Siveira do Santos
4 Eduardo Hernández

5 Michelle Pierri
6 Donal O'Regan

7 Vanessa Rolnik
8 Carlos Lizama

9 Alejandro Ciacedo (Pós-doutorado)

1.1 Estudantes

1. Alejandro Ciacedo (Pós-doutorado) projeto: Equaçõs degeneradas do tipo neutro

2. Denis Fernandes da Silva. PIBIC, projeto: Equações Diferenciais Parciais e Aplicações.

3. Luis Pedro Lombardi Junior, PICME-UFSCAR, projeto: Equações Diferenciais Ordinárias e Aplicações.

4. Luciano Donnabella, TCC, projeto: Equações de Diferenças e Aplicações em Economia.

5. Luis Augusto Teles. Ensinar com pesquisa.

6. Yezhou Teng, IC, projeto: Equações de Diferenças e Aplicações em Economia.

7. Cláudio Vasconcelos, IC, projeto: Uma Introdução à Análise Matemática

8. Jéssica Faria, TCC, projeto: Uma Abordagem da Teoria de Otimização Dinâmica para Alunos de Graduação Utilizando a Ferramenta Microsoft Excel Solver.

9. Paola Torresan, IC Fapesp, projeto:

10. Luis Augusto Teles, Ensinar cm pesquisa, TCC, projeto:

2 Tópicos

- Equações diferenciais abstratas; Equações diferenciais funcionais abstratas do tipo neutro; Quase-periodicidade em sistemas abstratos, estabilidade.

3 Publicações recentes

1. Eduardo Hernández, Donal O'Regan On a new class of abstract impulsive differential equations. Accepted for publication in *Proc. Amer. Math. Soc.*

2. Hernández, Eduardo., O'Regan, Donal. On a New Class of Abstract Neutral Differential Equations. *J. Functional Analysis.* 261 (2011), 12, 3457-3481.

3. Hernández, Eduardo., Donal O'Regan., Balachandran, Krishnan, Comments on some recent results on controllability of abstract differential problems. *To appear in J. Optim. Theory Appl.*

4. Eduardo Hernández. C^α-Classical solutions for an abstract non-autonomous integro-differential equations. *Proc. Amer. Math. Soc.* 139 (2011), 4307-4318.

5. Michelle Pierri, Hernán Henríquez, Andréa Prokopczyk. Periodic solutions of abstract neutral functional differential equations. *J. Math. Anal. Appl.* 385, 2, 608-621.

6. Hernández, Eduardo., Donal O'Regan. C^α-Hölder classical solutions for non-autonomous neutral differential equations. *Discrete Contin. Dyn. Syst. A.* 29 (2011), no. 1, 241-260.

7. Michelle Pierri, Donal O'Regan, Vanessa Rolnik. Existence of solutions for semi-linear abstract differential equations with not instantaneous impulses". To appear in *Appl. Math. Comput.*

8. Hernández, Eduardo., Donal O'Regan., Bená, Maria Aparecida. On a new class of abstract integral equations and applications. To appear in *Appl. Math. Comput.*

9. Michelle Pierri Vanessa Rolnik On pseudo $\mathcal{S}$-asymptotically periodic functions. To appear in *Bull. Aust. Math. Soc.*

10. Hernández, Eduardo., Donal O'Regan. Existence of solutions for abstract neutral integro-differential equations with unbounded delay. *Czechoslovak Mathematical Journal.* vol. 61, no. 3 (2011), pp. 691-706.

11. Eduardo Hernández, Michelle Pierri, Maria Aparecida Bená. Asymptotically almost periodic solutions for abstract neutral integro-differential equations, *Appl. Math. Comput.* 217, (2011) 22, 8963-8972.

12. Hernández, Eduardo., Donal O'Regan. Existence of solutions for abstract non-autonomous neutral differential equations. *Canadian Mathematical Bulletin* doi:10.4153/CMB-2011-111-1.

13. Hernández, Eduardo., Henríquez, Hernán. Existence of solutions of second-order partial neutral functional differential equations with infinite delay. *Rocky Mountain Journal of Mathematics 6, 41 2011, pp. 1-22.*

14. Hernández, Eduardo., Dos Santos, José Paulo C., Henríquez, Hernán. Existence results for neutral integro-differential equations with unbounded delay. *Journal of Integral Equations and Applications*, Vol. 23 (2011) 2, 289-330.

15. M. Pierri. On S-Asymptotically ω-Periodic functions and applications. *Nonlinear Analysis* 75 (2012) 651-661.

16. Hernández, Eduardo; O'Regan, Donal; Balachandran, Krishnan; Existence results for abstract fractional differential equations with nonlocal conditions via resolvent operators. *Indag. Math. (N.S.)* 24 (2013), no. 1, 68-82.

17. Eduardo Hernández, Jair Silvério dos Santos, Katia A. G. Azevedo. On differential equations with nonlocal conditions involving the temporal derivative of the solution. *Indagationes Mathematicae.* 23, (2012), 3, 401-422.

18. Cuevas, Claudio; Pierri, Michelle; Sepulveda, Alex Weighted S-asymptotically ω-periodic solutions of a class of fractional differential equations. *Adv. Difference Equ.* 2011, Art. ID 584874, 13 pp.

19. Eduardo Hernández, Jair Silvério dos Santos, Katia A. G. Azevedo. On a class of abstract differential equations with nonlocal conditions. *Nonlinear Analysis* 74, (2011) 2624-2634.

20. Eduardo Hernández, Michelle Pierri, Andréa Prokopczyk. On a class of abstract neutral functional differential equations. *Nonlinear Analysis* 74 (2011), pp. 3633-3643.

21. Hernández, Eduardo., On a class of abstract functional differential equations involving almost sectorial operators. *Differential Equations and Applications.* 3 (2011), 1-10.

22. Hernández, Eduardo. Global solutions for abstract impulsive neutral differential equations. *Math. Comput. Modelling* 53 (2011), no. 1-2, 196-204.

4   Artigos submetidos para publicação

1. Hernández, Eduardo., Donal O'Regan., Global solutions for a new class of abstract neutral differential equations.

2. Michelle Pierri, Donal O'Regan. $\mathcal{S}$-asymptotically ω-periodic solutions for abstract neutral differential equations

3. Hernández, Eduardo., Donal O'Regan., On a new class of abstract integro-differential equations

4. Eduardo Hernandez, Donal O'Regan, Balachandran On the lack of controllability in abstract control systems with a linear part dominated by a sectorial operator.

5. Maria Aparecida Bená, Sandra M. S. de Godoy. Partial equiasymptotic stability in measure for delay differential equations.

5   Artigos em preparação

1. Michelle Pierri, Andréa Prokopczyk, Hernan Henriquez. Asymptotically almost periodic solutions for abstract second order neutral differential equations

2. Michelle Pierri, Hernan Henriquez. Global solutions for abstract differential equations with non-instantaneous impulses.

3. Katia A. G. Azevedo, Maria Aparecida Bená. Existence of solutions for retarded differential equations with non-instantaneous impulses.