UNIVERSITÀ DEGLI STUDI DELL'AQUILA

Prof. Rosella Colomba Sampalmieri

Curriculum scientifico

(Aggiornato il 2019/10/30)

AREA DI RICERCA ATTUALE: equazioni alle derivate parziali, in particolare: modelli ibridi per semiconduttori,sistemi non strettamente iperbolici.

ALTRE AREE DI RICERCA: convergenze in spazi di grafi di funzioni. Metodi variazionali applicati allo studio delle geodetiche sulle varietà Lorentziane,equazioni dalla teoria dei materiali viscoelastici con memoria.

PUBBLICAZIONI

Di Michele, F., Mei, M., Rubino, B., & Sampalmieri, R.
Stationary Solutions for a new hybrid quantum model for semiconductors with discontinuous pressure functional and relaxation time.
Accettato per la publicazione in*Mathematics and Mechanics of Solids(2018)*
Di Michele, F., Mei, M., Rubino, B., & Sampalmieri, R.
Existence and uniqueness of solutions for a stationary hybrid quantum hydrodynamical model with general pressure functional.
Sottomesso per la publicazione a*Computational and Applied Mathematics*

Di Michele, Federica; Mei, Ming; Rubino, Bruno; Sampalmieri, Rosella
Thermal equilibrium solution to new model of bipolar hybrid quantum hydrodynamics. *J. Differential Equations* 263 (2017), no. 3, 1843?1873.

Di Michele, Federica; Rubino, Bruno; Sampalmieri, Rosella
A steady-state mathematical model for an EOS capacitor: the effect of the size exclusion. *Netw. Heterog. Media*11 (2016), no. 4,603?625. 82D37 (35J25)

Di Michele, Federica; Mei, Ming; Rubino, Bruno; Sampalmieri, Rosella
Stationary solutions to hybrid quantum hydrodynamical model of semiconductors in bounded domain. *Int. J. Numer. Anal. Model.*13 (2016), no. 6,898?925.

Djoufedie, George Noel; Felaco, Elisabetta; Rubino, Bruno; Sampalmieri, Rosella
Convergence of Lax-Friedrichs and Godunov schemes for a nonstrictly hyperbolic system of conservation laws arising in oil recovery. *Contin. Mech. Thermodyn.*28 (2016), no. 1-2,331?349. 65M06 (65M12 76S05)

Felaco, Elisabetta; Rubino, Bruno; Sampalmieri, Rosella
Global existence to the Cauchy problem for hyperbolic conservation laws with an isolated umbilic point. *Quart. Appl. Math.*71 (2013), no. 4,629?659.

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Asymptotic behavior of solutions to Euler-Poisson equations for bipolar hydrodynamic model of semiconductors. *J. Differential Equations* 255 (2013), no. 10,3150?3184.
35L50 (35A01 35A02 35A09 35B40 35L60 35L65 82D37)

Mei, Ming; Rubino, Bruno; Sampalmieri, Rosella
Asymptotic behavior of solutions to the bipolar hydrodynamic model of semiconductors in bounded domain. *Kinet. Relat. Models*5 (2012), no. 3,537?550.
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Kirova, Yordanov,V. Georgiev, B. Rubino, R. Sampalmieri,*Asymptotic behaviour for linear and nonlinear elastic waves in materials with memory*,**Journal of Non-Crystalline Solids**, 354(2008), 4126-4137.

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Sampalmieri, R. Stability of a problem from viscoelasticity. *C. R. Acad. Bulgare Sci.* 55 (2002), no. 12, 11?16. 35Q72 (35B35 35B45 74D10)

Giannoni, Fabio; Piccione, Paolo; Sampalmieri, Rosella
On the geodesical connectedness for a class of semi-Riemannian manifolds.
J. Math. Anal. Appl. 252 (2000), no. 1, 444?476. 58E10 (53C22)

Antonacci, Flavia; Germinario, Anna; Sampalmieri, Rosella
Light rays having extreme points with the same spatial coordinates.
Differential Geom. Appl. 10 (1999), no. 2, 161?178. 58E10 (58E05)

Antonacci, Flavia; Sampalmieri, Rosella
Closed geodesics on compact Lorentzian manifolds of splitting type.
*Proc. Roy. Soc. Edinburgh Sect. A*128 (1998), no. 3,447?462.
58E10 (53C22 53C50)

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Weak solutions of a conservation law with memory in several space variables.
*NoDEA Nonlinear Differential Equations Appl.*5 (1998), no. 1,99?116.
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Antonacci, Flavia; Sampalmieri, Rosella
Some results about geodesics on Lorentzian manifolds of splitting type.
Proceedings of the Second World Congress of Nonlinear Analysts, Part 1 (Athens, 1996). *Nonlinear Anal.*30 (1997), no. 1,571?577.

Sampalmieri, RosellaWeak solutions of a conservation law with memory.
*Boll. Un. Mat. Ital. B (7)*11 (1997), no. 2,393?414. 35L65 (35D05 45K05)

Antonacci, Flavia; Sampalmieri, Rosella
On a class of geodesically connected Lorentzian manifolds.
*J. Differential Equations*138 (1997), no. 1,171?187.58E10 (53C50)

Piccione, Paolo; Sampalmieri, Rosella
Geodesical connectedness of compact Lorentzian manifolds. *Dynam. Systems Appl.* 5 (1996), no. 4,479?502. (Reviewer: Addolorata Salvatore)
58E10 (53C22 53C50 58E05)

Piccione, Paolo; Sampalmieri, Rosella
Attouch-Wets convergence and Kuratowski convergence on compact sets.
*Comment. Math. Univ. Carolin.*36 (1995), no. 3,
551?562. (Reviewer: Ilya S. Molchanov) 54C35 (49J52)

Sampalmieri, RosellaKuratowski convergence on compact sets.
*Atti Sem. Mat. Fis. Univ. Modena*40 (1992), no. 2,381?390.

Myjak, J.; Sampalmieri, R.On the porosity of the set of ?-nonexpansive mappings without fixed points. Proc. Amer. Math. Soc.114 (1992), no. 2,357?363.
47H09 (47H04 47H10)