

L I S T A **lucrărilor științifice**

A. Teza de doctorat

Titlu: Integrabilitate și clase de soluții pentru ecuații de evoluție neliniare

Instituție: Universitatea din Craiova

Conducător științific: Radu-Dan Constantinescu

An susținere: 2022

Domeniul: Fizică

B. Lucrări (articole, studii) în reviste de specialitate clasificate de CNCSIS în categoriile A, B sau C sau în volume ale unor manifestări științifice naționale sau internaționale:

1. Cimpoiasu, R., Constantinescu, R., & Pauna, A. S. (2026), Lie symmetries and self-similar solutions for a generalized 2D reaction-diffusion equation with time-dependent coefficients. *Symmetry, under review*
2. Păuna, A. M. (2025, April). Generalized Dodd-Bullough-Mikhailov equations with given classes of solutions. In *Journal of Physics: Conference Series* (Vol. 3002, No. 1, p. 012009). IOP Publishing.
3. Păuna, A. M. (2024, February). The auxiliary equation approach for solving reaction-diffusion equations. In *Journal of Physics Conference Series* (Vol. 2719, No. 1, p. 012002).
4. Constantinescu, R., Pauna, A. M., & Poenaru, M. M. (2023, October). Waves and bifurcations in describing the proliferation of the brain tumors. In *11th International Conference of the Balkan Physical Union* (p. 282).
5. Cimpoiasu, R., Constantinescu, R., & Pauna, A. S. (2021). Solutions of the Bullough–Dodd Model of Scalar Field through Jacobi-Type Equations. *Symmetry*, 13(8), 1529. <https://doi.org/10.3390/sym13081529>
6. Streche-Pauna, A., Florian, A. D., & Gerdjikov, V. S. (2021). On the Spectral Properties of Lax Operators Related to BD. I Symmetric Spaces. *Studies in Computational Intelligence*, 961, 345-358.
7. Constantinescu, R., Ionescu, C., & Pauna, A. (2020). A reduction method for solving nonlinear PDEs. *Annals of the University of Craiova, Physics*, 30(2).
8. Florian, A., Streche-Pauna, A., & Gerdjikov, V. S. (2020). On generalized Kulish-Sklyanin models. *Annals of the University of Craiova, Physics*, 30, 175-195.
9. Constantinescu, Radu, Fanel Iacobescu, and Alina Pauna (2019). "Nonlinear mathematical models for physical phenomena." In *10th Jubilee International Conference of the Balkan Physical Union*, vol. 2075, no. 1, p. 100005.
10. Cimpoiasu, R. & Pauna, A. (2018). Complementary wave solutions for the long-short wave resonance model via the extended trial equation method and the generalized Kudryashov method. *Open Physics*, 16(1), 419-426. <https://doi.org/10.1515/phys-2018-0057>

Data

29.05.2026

Semnătura

