

PUBLICATIONS

LIVIU IGNAT

- (1) Liviu I. Ignat, Diana Stan, Dispersive properties for discrete Schrodinger equations, accepted in Journal of Fourier Analysis and Applications.
- (2) Liviu I. Ignat, A splitting method for the nonlinear Schrödinger equation, Journal of Differential Equations Vol. 250, Issue 7, 1 April 2011, pp, 3022-3046
- (3) L.I. Ignat, Strichartz estimates for the Schrödinger Equation on a tree and applications, SIAM Journal of Mathematical Analysis, Vol. 42, No. 5, pp. 2041–2057, 2010.
- (4) L.I. Ignat and J.D. Rossi, Asymptotic expansions for nonlocal diffusion equations in L^q -norms for $1 \leq q \leq 2$. *Journal of Mathematical Analysis and Applications* 362 (2010), pp. 190-199.
- (5) L.I. Ignat and J.D. Rossi, Decay estimates for nonlocal problems via energy methods. *Journal de Mathématiques Pures et Appliquées*, (9) 92 (2009), no. 2, 163–187.
- (6) L.I. Ignat and E. Zuazua. Convergence of a two-grid algorithm for the control of the wave equation. *Journal of European Mathematical Society*, 11 (2009), no. 2, 351–391.
- (7) L.I. Ignat and E. Zuazua. Numerical dispersive schemes for the nonlinear Schrödinger equation. *SIAM Journal of Numerical Analysis*, 47 (2009), no. 2, 1366–1390..
- (8) L.I. Ignat and J.D. Rossi, Refined asymptotic expansions for nonlocal diffusion equations *Journal of Evolution Equations*, 8 (2008), no. 4, 614–629.
- (9) L.I. Ignat and J.D. Rossi, Asymptotic behaviour for a nonlocal diffusion equation on a lattice. *Z. Angew. Math. Phys.* 59 (2008), no. 5, 918–925.
- (10) L. I. Ignat and J.D. Rossi. *A nonlocal convection-diffusion equation*. J. Functional Analysis, 251(2) (2007), 399–437.
- (11) L.I. Ignat. Fully discrete schemes for the Schrödinger equation: Dispersive properties. *Math. Models Methods Appl. Sci.*, 17(4):567–591, 2007.
- (12) L.I. Ignat. Global Strichartz estimates for approximations of the Schrödinger equation. *Asymptotic Analysis*, 52:37–51, 2007.
- (13) L.I. Ignat and E. Zuazua. Dispersive properties of numerical schemes for nonlinear Schrödinger equations. In *Foundations of Computational Mathematics, Santander 2005. L. M. Pardo et al. eds*, volume 331, pages 181–207. London Mathematical Society Lecture Notes, 2006.

- (14) L.I. Ignat. Qualitative properties of a numerical scheme for the heat equation. Bermúdez de Castro, A. (ed.) et al., Proceedings of ENUMATH 2005, the 6th European conference on numerical mathematics and advanced applications, Santiago de Compostela, Spain, July 18–22, 2005. Springer. 593-600, 2006.
- (15) L.I. Ignat and E. Zuazua. A two-grid approximation scheme for nonlinear Schrödinger equations: dispersive properties and convergence. *C. R. Acad. Sci. Paris, Ser. I*, 341(6):381–386, 2005.
- (16) L.I. Ignat and E. Zuazua. Dispersive properties of a viscous numerical scheme for the Schrödinger equation. *C. R. Acad. Sci. Paris, Ser. I*, 340(7):529–534, 2005.
- (17) L. I. Ignat and C. Lefter and V. D. Radulescu, Minimization of the renormalized energy in the unit ball of R^2 . *Nieuw Arch. Wiskd.* (5) 1 (2000), no. 3, 278–280