

Estabilidad de ecuaciones diferenciales

Parte II

Dr. Julien Ricaud

Temario

1. Introducción
2. Teoría de la estabilidad
3. Estabilidad para algunas ecuaciones de Schrödinger
4. Estabilidad para algunas ecuaciones de Dirac

Bibliografía

- [1] D. ALDUNATE, J. RICAUD, E. STOCKMEYER, AND H. VAN DEN BOSCH, *Results on the spectral stability of standing wave solutions of the Soler model in 1-D*, Commun. Math. Phys., 401 (2023), pp. 227–273.
- [2] J. ANGULO PAVA, *Nonlinear dispersive equations. Existence and stability of solitary and periodic travelling wave solutions.*, vol. 156 of Math. Surveys Monogr., American Mathematical Society, Providence, RI, 2009.
- [3] N. BOUSSAÏD AND A. COMECH, *Nonlinear Dirac Equation: Spectral Stability of Solitary Waves*, vol. 244 of Math. Surveys Monogr., American Mathematical Society, Providence, RI, 2019.
- [4] T. CAZENAVE, *Semilinear Schrödinger equations*, vol. 10 of Courant Lect. Notes Math., American Mathematical Society & Courant Institute of Mathematical Sciences, New York, 2003.
- [5] ———, *An overview of the nonlinear Schrödinger equation*. Lecture notes. <http://cazenavet.free.fr/>, 2021.
- [6] S. CUCCAGNA, *A survey on asymptotic stability of ground states of nonlinear Schrödinger equations II*, Discrete Contin. Dyn. Syst. Ser. S, 14 (2021), pp. 1693–1716.
- [7] Y. L. DALETS'KYĬ AND M. G. KREĬN, *Stability of Solutions of Differential Equations in Banach Space*, vol. 43 of Transl. Math. Monogr., American Mathematical Society, Providence, RI, 1974. Translated from the Russian by S. Smith.
- [8] L. C. EVANS, *Partial Differential Equations*, vol. 19 of Grad. Stud. Math., American Mathematical Society, Providence, RI, 2nd ed., 2010.
- [9] T. KAPITULA AND K. PROMISLOW, *Spectral and Dynamical Stability of Nonlinear Waves*, vol. 185 of Appl. Math. Sci., Springer, New York, NY, 1 ed., 2013.
- [10] B. SANDSTEDTE, *Stability of travelling waves*, in Handbook of Dynamical Systems, B. Fiedler, ed., vol. 2, Elsevier Science, Amsterdam, 2002, pp. 983–1055.
- [11] T. TAO, *Nonlinear Dispersive Equations: Local and Global Analysis*, vol. 106 of CBMS Reg. Conf. Ser. Math., American Mathematical Society, Providence, RI, 2006.