

Bibliography

- Aktosun, T. (2009). *Inverse Scattering Transform and the Theory of Solitons*, page 4960–4971. Springer New York.
- Boussinesq, J. (1877). *Essai sur la théorie des eaux courantes*. Impr. nationale.
- Dauxois, T. (2008). Fermi, Pasta, Ulam and a mysterious lady. *Physics Today*, 61(1):55–57. arXiv: 0801.1590.
- Dauxois, T. and Peyrard, M. (2006). *Physics of Solitons*. Cambridge University Press.
- Drazin, P. G. and Johnson, R. S. (1989). *Solitons: An Introduction*. Cambridge University Press.
- Fermi, E., Pasta, J. R., Ulam, S. M., and Tsingou, M. (1955). Studies of nonlinear problems. No. LA-1940. Los Alamos Scientific Lab., N. Mex.
- Gardner, C. S., Greene, J. M., Kruskal, M. D., and Miura, R. M. (1967). Method for solving the korteweg-devries equation. *Phys. Rev. Lett.*, 19:1095–1097.
- Gordon, W. (1926). Der Comptoneffekt nach der Schrödingerschen Theorie. *Zeitschrift für Physik*, 40(1):117–133.
- Hirota, R. (1971). Exact solution of the Korteweg–de Vries equation for multiple collisions of solitons. *Phys. Rev. Lett.*, 27:1192–1194.
- John Scott Russell (1845). *Report on Waves: Made to the Meetings of the British Association in 1842-43*.
- Kenig, C. E., Ponce, G., and Vega, L. (1991). Well-posedness of the initial value problem for the

korteweg-de vries equation. *Journal of the American Mathematical Society*, 4(2):323–347.

Klein, O. (1926). Quantentheorie und fünfdimensionale Relativitätstheorie. *Zeitschrift für Physik*, 37(12):895–906.

Korteweg, D. D. J. and Vries, D. G. d. (1895). On the change of form of long waves advancing in a rectangular canal, and on a new type of long stationary waves. *The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science*, 39(240):422–443.

Manton, N. and Sutcliffe, P. (2004). *Topological Solitons*. Cambridge Monographs on Mathematical Physics. Cambridge University Press, Cambridge.

Miura, R. M. (1968). Korteweg-de Vries Equation and Generalizations. I. A Remarkable Explicit Nonlinear Transformation. *Journal of Mathematical Physics*, 9(8):1202–1204.

Miura, R. M., Gardner, C. S., and Kruskal, M. D. (1968). Korteweg – de Vries Equation and Generalizations. II. Existence of Conservation Laws and Constants of Motion. *Journal of Mathematical Physics*, 9(8):1204–1209.

Porter, M. A., Zabusky, N. J., Hu, B., and Campbell, D. K. (2009). Fermi, Pasta, Ulam and the birth of experimental mathematics: a numerical experiment that Enrico Fermi, John Pasta, and Stanislaw Ulam reported 54 years ago continues to inspire discovery. *American Scientist*, 97(3):214–221.

Takahashi, D. and Satsuma, J. (1990). A soliton cellular automaton. *Journal of the Physical Society of Japan*, 59:3514–3519.

Zabusky, N. J. and Kruskal, M. D. (1965). Interaction of “solitons” in a collisionless plasma and the recurrence of initial states. *Physical Review Letters*, 15(6):240.