Publications

1. Jenkins, R., Liu, J., Perry, P., Sulem, C., "Soliton resolution for the derivative non-linear Schrödinger equation", 45 pages. (submitted to *Comm. Math. Phys.*) arXiv:1710.03819.
2. Jenkins, R., Liu, J., Perry, P., Sulem, C., "Global well-posedness for the derivative non-linear Schrödinger equation", 43 pages. (submitted to *Comm. in PDE*) arXiv:1710.03810.
3. Jenkins, R., McLaughlin, K., "Behavior of the roots of the Taylor polynomials of the Riemann ξ function with growing degree", 28 pages. (accepted by *Constr. Approx.*) arXiv:1609.05965.
4. Borghese, M., Jenkins, R., McLaughlin, K., "Long time asymptotic behavior of the focusing nonlinear Schrödinger equation", 38 pages. *Ann. Inst. H. Poincaré Anal. Non Linéaire*, (accepted, doi: `https://doi.org/10.1016/j.anihpc.2017.08.006`).
5. Buckingham, R., Jenkins, R., Miller, P., "Semiclassical soliton ensembles for the three wave resonant interaction equations", *Comm. Math. Phys.* **354** (2017), n.3, 1015-1100.
6. Cuccagna, S. and Jenkins, R., "On the asymptotic stability of N-soliton solutions of the defocusing nonlinear Schrödinger equation", *Comm. Math. Phys.* **343** (2016), n.3, 921-969.
7. Jenkins, R., "Regularization of a sharp shock by the defocusing nonlinear Schrödinger equation", *Nonlinearity* **28** (2015) n.7 2131-2180.
8. Jenkins, R. and McLaughlin, K., "The semiclassical limit of focusing NLS for a family of non-analytic initial data", *CPAM* **67** (2014), n.2, 246-320.
9. Jenkins, R. and Baik, J., "Limiting distributions of maximal crossing and nestings of Poissonized random matchings", *Ann. Probab.* **41** (2013), n.6, 4359-4406.
10. Jenkins, R., "Semiclassical asymptotics of the focusing nonlinear Schrödinger equation for square barrier initial data", (Thesis)

    In preparation:

11. Jenkins, R., Tovbis, A., "Generation of multiphase waves from a barrier potential in the semiclassical limit of the focusing nonlinear Schrödinger equation".
12. Buckingham, R., Jenkins, R., Miller, P., "Semiclassical soliton ensembles for the three wave resonant interaction equations: asymptotic behavior for small time".
13. Buckingham, R., Jenkins, R., Miller, P., "Semiclassical soliton ensembles of the nonlinear Schrödinger equation approximating compactly supported initial data".
14. Jenkins, R., McLaughlin, K., Pounder, K., "The inverse spectral problem for Jacobi matrices and applications to the finite Toda lattice".
15. Jenkins, R., Pounder, K., "Interacting shock fronts in the Ablowitz-Ladik equations".