

BIBIOGRAPHY

1. L. Bergé, A. De Bouard, and J.-C. Saut. Blowing up time-dependent solutions of the planar, Chern-Simons gauged nonlinear Schrödinger equation. *Nonlinearity*, 8(2):235–253, 1995. [Bergé-De Bouard-Saut1]
2. _____. Collapse of Chern-Simons-gauged matter fields. *Phys. Rev. Lett.*, 74(20):3907–3911, 1995. [Bergé-De Bouard-Saut2]
3. J. Bourgain and W. Wang, Construction of blowup solutions for the nonlinear Schrödinger equation with critical nonlinearity, *Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4)* 25 (1997), no. 1-2, 197–215 (1998). Dedicated to Ennio De Giorgi.
4. B. Dodson. A Liouville theorem for the Chern–Simons–Schrödinger equation. arXiv preprint arXiv:2302.12384, 2023.
5. B. Dodson. Sequential convergence of a solution to the Chern–Simons–Schrodinger equation. arXiv preprint arXiv:2309.10925, 2023.
6. C. Gao and J. Krieger. Optimal polynomial blow up range for critical wave maps. *Commun. Pure Appl. Anal.*, 14(5):1705–1741, 2015.
7. H. Huh. Energy solution to the Chern-Simons-Schrödinger equations. *Abstr. Appl. Anal.*, pages Art. ID 590653, 7, 2013.
8. R. Jackiw and S.-Y. Pi. Soliton solutions to the gauged nonlinear Schrödinger equation on the plane. *Phys. Rev. Lett.*, 64(25):2969–2972, 1990.
9. K. Kim and S. Kwon. On pseudoconformal blow-up solutions to the self-dual Chern-Simons- Schrödinger equation: existence, uniqueness, and instability. arXiv e-prints 1909.01055, to appear in *Mem. Amer. Math. Soc.*, 2019. [Kim-Kwon1]
10. K. Kim and S. Kwon. Construction of blow-up manifolds to the equivariant self-dual Chern- Simons-Schrödinger equation. arXiv e-prints 2009.02943, 2020. [Kim-Kwon2]
11. K. Kim, S. Kwon, and S.-J. Oh. Blow-up dynamics for smooth finite energy radial data solutions to the self-dual Chern-Simons-Schrödinger equation, to appear in *Ann. Sci. Éc. Norm. Supér.*, arXiv e-prints 2010.03252, 2020. [Kim-Kwon-O.1]
12. K. Kim, S. Kwon, and S.-J. Oh. Soliton resolution for equivariant self-dual Chern-Simons-Schrödinger equation in weighted Sobolev class, to appear in *Amer. J. Math.*, arXiv e-prints 2202.07314, 2022. [Kim-Kwon-O.2]
13. K. Kim, S. Kwon, and S.-J. Oh. Blow-up dynamics for radial self-dual Chern-Simons- Schrödinger equation with prescribed asymptotic profile. preprint, 2022. [Kim-Kwon-O.3]
14. J. Krieger, S. Miao, and W. Schlag, A stability theory beyond the co-rotational setting for critical Wave Maps blow up, arXiv e-prints arXiv:2009.08843, 2020.
15. J. Krieger, W. Schlag, and D. Tataru, Renormalization and blow up for charge one equivariant wave critical wave maps. *Invent. Math.*, 171(3):543–615, 2008.
16. _____, Renormalization and blow up for the critical Yang–Mills problem, *Advances in Math.* 221 (2009) 1445–1521

17. J. Jendrej, Construction of type II blow-up solutions for the energy-critical wave equation in dimension 5, *J. Funct. Anal.* 272 (2017) 866–917.
18. J. Jendrej, A. Lawrie, and C. Rodriguez, Dynamics of bubbling wave maps with prescribed radiation, arXiv e-prints 1908.08512, to appear in *Ann. Sci. Éc. Norm. Supér.* (2019).
19. A. Lawrie, S.-J. Oh, and S. Shahshahani, Self-dual Chern-Simons-Schrödinger equation, unpublished, 1–9.
20. Z. Li and B. Liu, On threshold solutions of the equivariant Chern-Simons-Schrödinger equation. *Ann. Inst. H. Poincaré C Anal. Non Linéaire*, 39(2):371–417, 2022.
21. Z. M. Lim, Large data well-posedness in the energy space of the Chern-Simons-Schrödinger system. *J. Differential Equations*, 264(4):2553–2597, 2018.
22. B. Liu and P. Smith, Global wellposedness of the equivariant Chern-Simons-Schrödinger equation. *Rev. Mat. Iberoam.*, 32(3):751–794, 2016.
23. B. Liu, P. Smith, and D. Tataru, Local wellposedness of Chern-Simons-Schrödinger. *Int. Math. Res. Not. IMRN*, (23):6341–6398, 2014.
24. F. Merle and P. Raphaël, Sharp upper bound on the blow up rate for critical nonlinear Schrödinger equation, *Geom. Funct. Anal.*, 13 (2003), 591–642.
25. ———, On universality of blow up profile for L2 critical nonlinear Schrödinger equation, *Invent. Math.*, 156 (2004), 565–672.
26. ———, Blow up dynamic and upper bound on the blow up rate for critical nonlinear Schrödinger equation, *Ann. Math.*, 161 (2005), 157–222.
27. ———, Profiles and quantization of the blow up mass for critical nonlinear Schrödinger equation, *Commun. Math. Phys.*, 253 (2005), 675–704.
28. ———, Sharp lower bound on the blow up rate for critical nonlinear Schrödinger equation, *J. Am. Math. Soc.*, 19 (2006), 37–90.
29. F. Merle, P. Raphaël, and I. Rodnianski, Blowup dynamics for smooth data equivariant solutions to the critical Schrödinger map problem, *Invent. Math.* 193 (2013), no. 2, 249–365.
30. F. Merle, P. Raphaël, and J. Szeftel, The instability of Bourgain-Wang solutions for the L2 critical NLS, *Amer. J. Math.* 135 (2013), no. 4, 967–1017.
31. S.-J. Oh and F. Pusateri, Decay and scattering for the Chern-Simons-Schrödinger equations. *Int. Math. Res. Not. IMRN*, (24):13122–13147, 2015.
32. G. Perelman, Blow Up Dynamics for Equivariant Critical Schrödinger Maps, *Commun. Math. Phys.*, 330 (2014) 69–105.
33. P. Raphaël and I. Rodnianski, Stable blow up dynamics for the critical corotational wave maps and equivariant Yang-Mills problems, *Publ. Math. Inst. Hautes Études Sci.* 115 (2012), 1–122. MR2929728
34. P. Raphaël and R. Schweyer, Stable blowup dynamics for the 1-corotational energy critical harmonic heat flow, *Commun. Pure Appl. Math.* 66 (2013), no. 3, 414–480. MR3008229
35. ———, Quantized slow blow-up dynamics for the corotational energy-critical harmonic heat flow, *Anal. PDE* 7 (2014), no. 8, 1713–1805. MR3318739
36. I. Rodnianski and J. Sterbenz, On the formation of singularities in the critical O(3) σ -model, *Ann. of Math.* (2) 172 (2010), no. 1, 187–242. MR2680419
37. J. B. van den Berg and J. F. Williams, (In-)stability of singular equivariant solutions to the Landau-Lifshitz-Gilbert equation, *European J. Appl. Math.* 24 (2013), no. 6, 921–948. MR3181487