

1. Balaban, T.: Convergent renormalization expansions for lattice gauge theories, *Comm. Math. Phys.* 119 (1988), no. 2, 243{285.  
<https://doi.org/10.1007/BF01217741>
2. Charalambous, N., Gross, L.: The Yang-Mills heat semigroup on three-manifolds with boundary, *Comm. Math. Phys.* 317 (2013), no. 3, 727{785.  
<https://doi.org/10.1007/s00220-012-1558-0>
3. Charalambous, N., Gross, L.: Neumann domination for the Yang-Mills heat equation, *J. Math. Phys.* 56 (2015), no. 7, 073505, 21.  
<https://doi.org/10.1063/1.4927250>
4. Charalambous, N., Gross, L.: Initial behavior of solutions to the Yang-Mills heat equation, *J. Math. Anal. Appl.* 451 (2017), no. 2, 873{905.  
<https://doi.org/10.1016/j.jmaa.2017.02.027>
5. DeTurck, D. M.: Deforming metrics in the direction of their Ricci tensors, *J. Differential Geom.* 18 (1983), no. 1, 157{162.  
<https://doi.org/10.4310/jdg/1214509286>
6. Donaldson, S. K.: Anti self-dual Yang-Mills connections over complex algebraic surfaces and stable vector bundles, *Proc. London Math. Soc.* (3) 50 (1985), no. 1, 1{26.  
<https://doi.org/10.1112/plms/s3-50.1.1>
7. Gastel, A.: Nonuniqueness for the Yang-Mills heat flow, *J. Differential Equations* 187 (2003), no. 2, 391{411.  
[https://doi.org/10.1016/S0022-0396\(02\)00091-8](https://doi.org/10.1016/S0022-0396(02)00091-8)
8. Ginibre, J., Velo, G.: The Cauchy problem for coupled Yang-Mills and scalar fields in the temporal gauge, *Comm. Math. Phys.* 82 (1981/82), no. 1, 1{28.  
<https://doi.org/10.1007/BF01206943>
9. Ginibre, J., Velo, G.: Global existence of coupled Yang-Mills and scalar fields in  $(2 + 1)$ -dimensional space-time, *Phys. Lett. B* 99 (1981), no. 5, 405{410.  
[https://doi.org/10.1016/0370-2693\(81\)90558-X](https://doi.org/10.1016/0370-2693(81)90558-X)
10. Gross, L.: Abstract Wiener spaces, in: *Proc. 5th Berkeley Symp. Math. Stat. and Probab.* 2, part 1 (1965) 31{42, University of California Press, Berkeley.
11. Gross, L.: Equivalence of helicity and Euclidean self-duality for gauge fields, *Nuclear Phys. B* 945 (2019), 114685, 37.  
<https://doi.org/10.1016/j.nuclphysb.2019.114685>
12. Gross, L.: The Yang-Mills heat equation with finite action, To appear in: *Mem. Am. Math. Soc.*, arXiv:1606.04151.
13. Gross, L.: Stability for the Yang-Mills heat equation, Preprint, arXiv:1711.00114.
14. Gross, L.: The configuration space for Yang-Mills fields, In preparation, (2017b).

15. Grotowski, J. F.: Finite time blow-up for the Yang-Mills heat flow in higher dimensions, *Math. Z.* 237 (2001), no. 2, 321{333.  
<https://doi.org/10.1007/PL00004871>
16. Hassell, A.: The Yang-Mills-Higgs heat flow on  $R^3$ , *J. Funct. Anal.* 111 (1993), no. 2, 431{448.  
<https://doi.org/10.1006/jfan.1993.1020>
17. Hong, M.-C.: Heat flow for the Yang-Mills-Higgs field and the Hermitian Yang-Mills-Higgs metric, *Ann. Global Anal. Geom.* 20 (2001), no. 1, 23{46.
18. Hong, M.-C., Tian, G.: Global existence of the  $m$ -equivariant Yang-Mills flow in four dimensional spaces, *Comm. Anal. Geom.* 12 (2004), no. 1-2, 183{211.  
<https://doi.org/10.4310/CAG.2004.v12.n1.a10>
19. Hong, M.-C., Tian, G.: Asymptotical behaviour of the Yang-Mills flow and singular Yang-Mills connections, *Math. Ann.* 330 (2004), no. 3, 441{472.  
<https://doi.org/10.1007/s00208-004-0539-9>
20. Isobe, T., Marini, A.: On topologically distinct solutions of the Dirichlet problem for Yang-Mills connections, *Calc. Var. Partial Differential Equations* 5 (1997), no. 4, 345{358.  
<https://doi.org/10.1007/s005260050070>
21. Ito, K.: Stochastic integral, *Proc. Imp. Acad. Tokyo* 20 (1944), no. 8, 519{524.  
<https://doi.org/10.3792/pia/1195572786>
22. Lions, J. L.: Sur les espaces d'interpolation; dualite, *Math. Scand.* 9 (1961), 147{177.  
<https://doi.org/10.7146/math.scand.a-10632>
23. Marini, A.: Dirichlet and Neumann boundary value problems for Yang-Mills connections, *Comm. Pure Appl. Math.* 45 (1992), no. 8, 1015{1050.  
<https://doi.org/10.1002/cpa.3160450806>
24. Marini, A.: The generalized Neumann problem for Yang-Mills connections, *Comm. Partial Differential Equations* 24 (1999), no. 3-4, 665{681.  
<https://doi.org/10.1080/03605309908821437>
25. McKean, H. P.: *Stochastic Integrals*, Academic Press, New York, 1969.  
<https://doi.org/10.1016/B978-1-4832-3054-2.50008-X>
26. Naito, H.: Finite time blowing-up for the Yang-Mills gradient flow in higher dimensions, *Hokkaido Math. J.* 23 (1994), no. 3, 451{464.  
<https://doi.org/10.14492/hokmj/1381413099>
27. Oh, S.-J.: Finite energy global well-posedness of the Yang-Mills equations on  $R^{1+3}$ : an approach using the Yang-Mills heat flow, *Duke Math. J.* 164 (2015), no. 9, 1669{1732.  
<https://doi.org/10.1215/00127094-3119953>

28. Oh, S.-J., Tataru, D.: The hyperbolic Yang-Mills equation in the caloric gauge: local well-posedness and control of energy-dispersed solutions, *Pure Appl. Anal.* 2 (2020), no. 2, 233{384.  
<https://doi.org/10.2140/paa.2020.2.233>
29. Pulemotov, A.: The Li-Yau-Hamilton estimate and the Yang-Mills heat equation on manifolds with boundary, *J. Funct. Anal.* 255 (2008), no. 10, 2933{2965.  
<https://doi.org/10.1016/j.jfa.2008.07.025>
30. Rade, J.: On the Yang-Mills heat equation in two and three dimensions, *J. Reine Angew. Math.* 431(1992), 123{163.  
<https://doi.org/10.1515/crll.1992.431.123>
31. Sadun, L.: Continuum Regularized Yang-Mills Theory, Ph. D. Thesis, Univ. of California, Berkeley, 1987.
32. Schlatter, A. E., Struwe, M., Tahvildar-Zadeh, A. S.: Global existence of the equivariant Yang-Mills heat flow in four space dimensions, *Amer. J. Math.* 120 (1998), no. 1, 117{128.  
<https://doi.org/10.1353/ajm.1998.0004>
33. Seiler, E.: Gauge theories as a problem of constructive quantum field theory and statistical mechanics, *Lecture Notes in Physics*, 159, Springer-Verlag, Berlin, 1982.
34. Struwe, M.: The Yang-Mills flow in four dimensions, *Calc. Var. Partial Differential Equations* 2 (1994), no. 2, 123{150.  
<https://doi.org/10.1007/BF01191339>
35. Struwe, M.: Geometric evolution problems, in: *Nonlinear partial differential equations in differential geometry*, Park City, UT, 1992, IAS/Park City Math. Ser. 2 (1996) 257{339, Amer. Math. Soc., Providence, RI.  
<https://doi.org/10.1090/pcms/002/07>
36. Taibleson, M. H.: On the theory of Lipschitz spaces of distributions on Euclidean  $n$ -space. I. Principal properties, *J. Math. Mech.* 13 (1964), 407{479.  
<https://doi.org/10.1512/iumj.1964.13.13026>
37. Taubes, C. H.: Self-dual Yang-Mills connections on non-self-dual 4-manifolds, *J. Differential Geometry* 17 (1982), no. 1, 139{170.  
<https://doi.org/10.4310/jdg/1214436701>
38. Taubes, C. H.: Stability in Yang-Mills theories, *Comm. Math. Phys.* 91 (1983), no. 2, 235{263.  
<https://doi.org/10.1007/BF01211160>
39. Taylor, M. E.: *Partial differential equations III. Nonlinear equations*, Applied Mathematical Sciences, 117, Ed. 2, Springer, New York, 2011.
40. Uhlenbeck, K.: Removable singularities in Yang-Mills fields, *Comm. Math. Phys.* 83 (1982), no. 1, 11{29.  
<https://doi.org/10.1007/BF01947068>

41. Uhlenbeck, K.: Connections with  $L_p$  bounds on curvature, *Comm. Math. Phys.* 83 (1982), no. 1, 31{42.

<https://doi.org/10.1007/BF01947069>

42. Waldron, A.: Long-time existence for Yang-Mills flow, *Invent. Math.* 217 (2019), no. 3, 1069{1147.

<https://doi.org/10.1007/s00222-019-00877-2>

43. Weinkove, B.: Singularity formation in the Yang-Mills flow, *Calc. Var. Partial Differential Equations* 19 (2004), no. 2, 211{220.

<https://doi.org/10.1007/s00526-003-0217-x>

44. Yang, C. N., Mills, R. L.: Conservation of isotopic spin and isotopic gauge invariance, *Phys. Rev.* (2) 96 (1954), 191{195.

<https://doi.org/10.1103/PhysRev.96.191>

45. Zwanziger, D.: Covariant quantization of gauge fields without Gribov ambiguity, *Nuclear Phys. B* 192 (1981), no. 1, 259{269.

[https://doi.org/10.1016/0550-3213\(81\)90202-9](https://doi.org/10.1016/0550-3213(81)90202-9)