

Publications of Daniel Ruberman

1. *Double point surgery and configurations of surfaces* (with H. J. Kim), *Journal of Topology* **4** (2011), 573–590; <http://arxiv.org/abs/1001.3750> (2010)
2. *Seiberg-Witten equations, end-periodic Dirac operators, and a lift of Rohlin’s invariant* (with T. Mrowka and N. Saveliev), *J. Diff. Geom.* (to appear); <http://arxiv.org/abs/0905.4319> (2009).
3. *Smooth concordance of links topologically concordant to the Hopf link* (with J. C. Cha, T. Kim and S. Strle), *Bull. Lond. Math. Soc.*, to appear; <http://arxiv.org/abs/1012.2045> (2010).
4. *Mutation and instanton knot homology* (with P. B. Kronheimer and T. S. Mrowka), *Michigan Mathematical Journal* (to appear); <http://arxiv.org/abs/1012.1192> (2010)
5. *The $\bar{\mu}$ -invariant of Seifert fibered homology spheres and the Dirac operator* (with N. Saveliev), *Geom. Dedic.* (to appear); <http://arxiv.org/abs/1009.3201>
6. *Smooth surfaces with non-simply-connected complements* (with H.-J. Kim), *Algebraic & Geometric Topology* **8** (2008) 2263–2287. DOI: 10.2140/agt.2008.8.2263
7. *Knot concordance and Heegaard Floer homology invariants in branched covers* (with E. Grigsby and S. Strle). *Geometry and Topology*, **12** (2008), no. 4, 2249–2275. <http://www.arxiv.org/abs/math.GT/0701460>.
8. *Algebraic and Heegaard-Floer invariants of knots with slice Bing doubles* (with J. C. Cha and C. Livingston). *Math. Proc. Camb. Phil. Soc.*, **144**, No. 2 (2008), 403–410. <http://www.arxiv.org/abs/math.GT/0612419>.
9. *Topological triviality of smoothly knotted surfaces in 4-manifolds* (with H.-J. Kim), *Trans. Amer. Math. Soc.*, **360** (2008), no. 11, 5869–5881.
10. *Dirac operators on manifolds with periodic ends* (with N. Saveliev). *Gökava Geometry and Topology Journal*, **1** (2007). 33–50. <http://gokovagt.org/journal/2007/jggt07-rubesave.pdf>
11. *Rohlin’s invariant and gauge theory III. Homology 4-tori* (with N. Saveliev), *Geometry and Topology*, **9** (2005) Paper no. 47, pages 2079–2127.
12. *Casson-type invariants in dimension four* (with N. Saveliev), *Proceedings of the Fields-McMaster Conference on Geometry and Topology of Manifolds*. *Fields Institute Communications* **47** (2005), 281–306. <http://arxiv.org/abs/math.GT/0501090>
13. *Rohlin’s invariant and gauge theory, I: Homology 3-tori* (with N. Saveliev), *Comm. Math. Helv.*, **9** (2004), no. 3, 618–646. <http://arxiv.org/math.GT/0302131>.
14. *Rohlin’s invariant and gauge theory, II: Mapping tori* (with N. Saveliev), *Geometry and Topology*, **8** (2004) Paper no. 2, pages 35–76.
15. *Isospectrality and 3-manifold groups*, *Proc. Amer. Math. Soc.* **129** (2001), 2467–2471.
16. *Positive scalar curvature, diffeomorphisms, and the Seiberg-Witten equations.*, *Geometry and Topology*, Vol. 5 (2001) Paper no. 28, pages 895–924.
17. *Mod 2 Seiberg-Witten invariants of homology tori*, (with Sašo Strle), *Math Res. Lett.*, **7** (2000), no. 5–6, 789–799.
18. *Embedding tangles in links*, *J. Knot Theory Ramif.* **9** (2000), no. 4, 523–530.
19. *A polynomial invariant of diffeomorphisms of 4-manifolds*, *Geometry and Topology Monographs* **2** (1999), 473–487.
20. *Mutation and gauge theory. I. Yang-Mills invariants*, *Comment. Math. Helv.* **74** (1999), no. 4, 615–641.
21. *An obstruction to smooth isotopy in dimension 4*, *Math. Res. Lett.* **5** (1998), 743–758.
22. *A sextic surface cannot have 66 nodes* (with D. Jaffe), *J. Alg. Geom.* **6** (1997), 151–168.

23. *Null-homotopic embedded codimension-one spheres*, pages 229-232 in “Tight and taut submanifolds,” Cambridge Univ. Press, Cambridge (1997).
24. *A fake $\mathbf{CP}^2 \# \mathbf{RP}^4$* (with R. Stern), *Math. Res. Lett.* **4** (1997), 375–378.
25. *Relations among Donaldson invariants arising from negative 2-spheres and tori*, *Duke Math. J.* **83** (1996), 645-660.
26. *Configurations of 2-spheres in the K3 surface and other 4-manifolds*, *Math. Proc. Camb. Phil. Soc.* **120** (1996), 247-253.
27. *The minimal genus of an embedded surface of non-negative square in a rational surface*, *Turkish J. Math.* **20** (1996), 129-133.
28. *Involutions on spin 4-manifolds*, *Proc. Amer. Math. Soc.* **123** (1995) 593-597.
29. “The L^2 moduli space and a vanishing theorem for Donaldson’s Polynomial invariants” (with J. Morgan and T. Mrowka), *Monographs in Geometry and Topology*, International Press (1994).
30. *Splitting the spectral flow, and the Alexander matrix* (with P. Kirk and E. Klassen), *Comm. Math. Helv.* **69** (1994), 375-416.
31. *Smooth 2-spheres in homology K3 surfaces*, *Top. Appl.* **59** (1994), 1987-99.
32. *Homology and bounded homology of universal covers*. (Appendix to *Manifolds with wells of negative Ricci curvature*, by S. Rosenberg and K. D. Elworthy), *Invent. Math.* **103** (1991), 491-496.
33. *Cutting and pasting and the η -invariant* (with R. Meyerhoff), *Duke Math. J.* **61** (1990), 747-762.
34. *Mutation and the η -invariant* (with R. Meyerhoff), *J. Diff. Geom.* **31** (1990), 101-130.
35. *Seifert surfaces of knots in S^4* , *Pacific J. Math.* **145** (1990), 97-116.
36. *Invariants of tangles* (with T. Cochran), *Math. Proc. Camb. Phil. Soc.* **105** (1989), 299-306.
37. *Rational homology cobordisms of rational space forms*, *Topology* **27** (1988), 401-414.
38. *Imbeddings and homology cobordisms of lens spaces* (with S. Cappell) *Comm. Math. Helv.* **63** (1988), 75-89.
39. *The Casson-Gordon invariants in high-dimensional knot theory*, *Trans. Amer. Math. Soc.* **306** (1988), 579-595.
40. *Mutation and volumes of knots in S^3* , *Invent. Math.* **90** (1987), 189-215.
41. *Concordance of links in S^4* , *Contemporary Math.* **35** (Four Manifold theory) (1984), 481-483.
42. *Invariant Knots of free involutions of S^4* , *Top. Appl.* **18** (1984), 217-224.
43. *Doubly slice knots and the Casson-Gordon invariants*, *Trans. Amer. Math. Soc.* **279** (1983), 569-588.
44. *Imbedding punctured lens spaces and connected sums*, *Pacific J. Math.* **279** (1983), 569-588.
45. *Imbedding 4-manifolds and slicing links*, *Proc. Camb. Phil. Soc.* **91** (1982), 107-110.

Preprints

1. *Concordance properties of parallel links* (with S. Strle); <http://arxiv.org/abs/1108.4476> (2011).
2. *An index theorem for end-periodic operators* (with T. Mrowka and N. Saveliev); <http://arxiv.org/abs/1105.0260> (2011).
3. *Concordance to links with unknotted components* (with J. C. Cha); <http://arxiv.org/abs/1103.2417> (2011).
4. *Topologically slice knots with nontrivial Alexander polynomial* (with C. Livingston and M. Hedden), <http://arxiv.org/abs/1001.1538>, (2010).
5. *The Seiberg-Witten invariants of manifolds with wells of negative curvature*. <http://www.arxiv.org/abs/math.GT/0205234>, (2002).