Publikationsliste

Alexander Lytchak

51. *About every convex set in any generic Riemannian manifold*
To appear in **J. Reine Angew. Math**. (with A. Petrunin).

50. *A diameter gap for quotients of the unit sphere*
To appear in **J. Eur. Math. Soc.** (with C. Gorodski, C. Lange, R. Mendes).

49. *Structure of submetries*
To appear in **Geom. Topol.** (with V. Kapovitch).

48. *Ricci curvature in dimension 2*
To appear in **J. Eur. Math. Soc.** (with S. Stadler).

47. *Topological regularity of spaces with an upper curvature bound*
To appear in **J. Eur. Math. Soc.** (with K. Nagano).

46. *Remarks on manifolds with two-sided curvature bounds*
Anal. Geom. Metr. Spaces 9 (2021), 53-64 (with V. Kapovitch).

45. *Short retractions of CAT(1) spaces*
Proc. Amer. Math. Soc. 149 (2021), 1247-1257 (with A. Petrunin).

44. *Metric measure boundary and geodesic flow on Alexandrov spaces*
J. Eur. Math. Soc. 23 (2021), 29-62 (with V. Kapovitch, A. Petrunin).

43. *Improvements of upper curvature bounds*
Trans. Amer. Math. Soc. 373 (2020), 7153- 7166 (with S. Stadler).

42. *Canonical parametrization of metric discs*
Duke Math. **J.** 169 (2020), 761-797 (with S. Wenger).

41. *Dehn functions and Hölder extensions in asymptotic cones*
J. Reine Angew. Math. 763 (2020), 79-109 (with S. Wenger, R. Young).

40. *Rigidity if Busemann convex Finsler metrics*
Comment. Math. Helv. 94 (2019), 855-868 (with S. Ivanov).

39. *Geodesically complete spaces with an upper curvature bound*
Geom. Funct. Anal. 29 (2019), 295-342 (with K. Nagano).

38. *Conformal deformations of CAT(0) spaces*

Math. Ann. 373 (2019), 155-163 (with S. Stadler).

37. *Isoperimetric characterization of upper curvature bounds*
Acta Math. 22 (2018), 159-202 (with S. Wenger).

36. *Intrinsic structure of minimal discs in metric spaces*
Geom. Topol. 22 (2018), 591-644 (with S. Wenger).

35. *Algebraic nature of singular Riemannian foliations in spheres*
J. Reine Angew. Math. 744 (2018), 265-273 (with M. Radeschi).

34. *Area minimizing discs in metric spaces*
Arch. Rational Mech. Anal. 223 (2017), 1123-1182 (with S. Wenger).

33. *Energy and area minimizers in metric spaces*
Adv. Calc. Var. 10 (2017), 407-421 (with S. Wenger).

32. *The curvature of orbit spaces*
Geom. Dedicata 190 (2017), 135-142 (with C. Gorodski).

31. *Riemannian foliations on spheres*
Geom. Topol. 20 (2016), 1257-1274 (with B. Wilking).

30. *Isometric actions on spheres with an orbifold quotient*
Math. Ann. 365 (2016), 1041-1067 (with C. Gorodski).

29. *Regularity of harmonic discs in spaces with quadratic isoperimetric inequality*
Calc. Var. Partial Differential Equations 55 (2016), 55-98 (with S. Wenger).

28. *Riemannian foliations on contractible manifolds*
Münster J. Math. 8 (2015), 1-16 (with L. Florit, O. Goertsches, D. Toeben).

27. *Representations whose minimal reduction has a toric identity component*
Proc. Amer. Math. Soc. 143 (2015), 379-386 (with C. Gorodski).

26. *Polar foliations on symmetric spaces*
Geom. Funct. Anal. 24 (2014), 1298-1315.

25. *On orbit spaces of representations of compact Lie groups*
J. Reine Angew. Math. 691 (2014), 61-100 (with C. Gorodski).

24. *Homogeneous compact geometries*
Transform. Groups 19 (2014), 793-852 (with L. Kramer).

23. *On contractible orbifolds*
Proc. Amer. Math. Soc. 141 (2013), 3303-3304.

22*. Polar actions on symmetric spaces of higher rank*
Bull. London. Math. Soc. 45 (2013), 341-350 (with A. Kollross).

21. *Affine images of Riemannian manifolds*
Math. Z. 270 (2012), 809-817.

20. *On the smoothness of isometries between orbit spaces*
Proceedings RIGA (2011), 17-28 (with M. Alexandrino).

19. *Geometric resolution of singular Riemannian foliations*
Geom. Dedicata 149 (2010), 397-416.

18. *At infinity of finite-dimensional CAT(0) spaces*
Math. Ann. 346 (2010), 1-21 (with P.-E. Caprace).

17. *Curvature explosion in quotients and applications*
J. Differential Geom. 85 (2010), 117-140 (with G. Thorbergsson).

16. *Notes on the Jacobi equation*
Differential Geom. Appl. 27 (2009), 329-334.

15. *The de Rham decomposition theorem for metric spaces*
Geom. Funct. Anal. 18 (2008), 120-143 (with T. Foertsch).

14. *Non-positive curvature and the Ptolemy inequality*
Int. Math. Res. Not. 22 (2007) (with T. Foertsch, V. Schroeder).

13. *Tangent spaces and Gromov-Hausdorff limits of subanalytic spaces*
J. Reine Angew. Math. 608 (2007), 1-15 (with A. Bernig).

12. *Variationally complete actions on nonnegatively curved manifolds*
Illinois J. Math. 51 (2007), 605-615 (with G. Thorbergsson).

11*. Spaces with many affine functions*
Proc. Amer. Math. Soc. 135 (2007), 2263-2271 (with P. Schwer).

10. *Affine functions on CAT(κ) spaces*
Math. Z. 255 (2007), 231-244 (with V. Schroeder).

9. *Building-like spaces*
J. Math. Kyoto Univ. 46 (2006), 789-805 (with A. Balser).

8*. On Hoelder continuous Riemannian and Finsler metrics*
Trans. Amer. Math. Soc. 358 (2006), 2917-2926 (with A. Yaman).

7*. Rigidity of spherical buildings and joins*
Geom. Funct. Anal. 15 (2005), 720-752.

6*. Centers of convex subsets of buildings*
Ann. Global Anal. Geom. 28 (2005), 201–209 (with A. Balser).

5*. Almost convex subsets*
Geom. Dedicata 115 (2005), 201-218.

4*. Open map theorem in metric spaces*
St.-Petersburg Math. J. 17 (2005), 477-491.

3. *Differentiation in metric spaces*
St.-Petersburg Math. J. 16 (2005), 1017-1041.

2. *On the geometry of subsets of positive reach*
Manuscripta Math. 115 (2004), 199-205.

1. *A metric characterization of spherical and Euclidean buildings*
Geom. Topol. 5 (2001), 521-550 (with R. Charney).