Publikationsliste 2019

Alexander Lytchak

Metric measure boundary and geodesic flow on Alexandrov spaces
To appear in **JEMS** (with V. Kapovitch, A. Petrunin).

Rigidity of Busemann convex Finsler metrics
To appear in **Comment. Math. Helv.** (with S. Ivanov).

Dehn functions and Hölder extensions in asymptotic cones
J. Reine Angew. Math., online first, (2019) (with S. Wenger, R. Young).

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

Conformal deformations of CAT(0) spaces
Math. Ann., Vol. 373, (2019), 155-163 (with S. Stadler).

Isoperimetric characterization of upper curvature bounds
Acta Math., Vol. 221, (2018), 159-202 (with S. Wenger).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Differentiation in metric spaces
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On the geometry of subsets of positive reach
Manuscripta Math., Vol. 115, (2004), 199-205.

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