Publications, current work and academic work published

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Preprints

- Geometric theory of Weyl structures (with A. Cap). submitted, 37 pp.

Journal Articles

- Deformations of the Veronese embedding and Finsler 2-spheres of constant curvature (with C. Lange). *J. Inst. Math. Jussieu* (to appear), 32 pp.
- Vortices over Riemann surfaces and dominated splittings (with G. Paternain). *Ergodic Theory Dynam. Systems* (to appear), 26 pp.
- Metrisability of projective surfaces and pseudo-holomorphic curves. *Math. Z. 298* (2021), 10 pp.
- Extremal conformal structures on projective surfaces. *Ann. Sc. Norm. Super. Pisa Cl. Sci. (5) XX* (2020), 43 pp.
- Convex projective surfaces with compatible Weyl connection are hyperbolic (with G. Paternain). *Anal. PDE 13* (2020), 25 pp.
- GL(2)-structures in dimension four, H- atness and integrability (with W. Krynski). *Comm. Anal. Geom. 27* (2019), 18 pp.
- Minimal Lagrangian connections on compact surfaces. *Adv. Math. 354* (2019), 36 pp.
- Holomorphic differentials, thermostats and Anosov ows (with G. Paternain). *Math. Ann. 373* (2019), 28 pp.
- Gauge theory on projective surfaces and anti-self-dual Einstein metrics in dimension four (with M. Dunajski). *J. Geom. Anal. 28* (2018), 32 pp.
- Characterizing classical minimal surfaces via the entropy differential (with J. Bernstein). *J. Geom. Anal. 27* (2017), 34 pp.
- Convex integration and Legendrian approximation of curves (with N. Hungerbühler, M. Wasem). *J. Convex Anal.* 24 (2017), 9 pp.
- Geodesic rigidity of conformal connections on surfaces. *Math. Z. 281* (2015), 15 pp.
- One-dimensional projective structures, convex curves and the ovals of Benguria & Loss (with J. Bernstein). *Comm. Math. Phys. 336* (2015), 20 pp.
- Four-dimensional Kähler metrics admitting c-projective vector fields (with A. Bolsinov, V. Matveev, S. Rosemann). *J. Math. Pures Appl. 103* (2015), 39 pp.
- Two-dimensional gradient Ricci solitons revisited (with J. Bernstein). *Int. Math. Res. Not. 2015* (2015), 21 pp.
- On Kähler metrisability of two-dimensional complex projective structures. *Monatsh. Math. 174* (2014), 18 pp.
- Weyl metrisability of two-dimensional projective structures. *Math. Proc. Camb. Philos. Soc. 156* (2014), 15 pp.
- Reduction of beta-integrable 2-Segre structures. *Comm. Anal. Geom. 21* (2013), 24 pp.
- Soliton solutions of the mean curvature ow and minimal hypersurfaces (with N. Hunger-bühler). *Proc. Amer. Math. Soc. 140* (2012), 10 pp.
- Local embeddability of real analytic path geometries. *Differential Geom. Appl. 30* (2012), 4 pp.
- Charges of twisted branes: the exceptional cases (with M. Gaberdiel, S. Fredenhagen). *J. High Energy Phys. 2005* (2005), 13 pp.

Theses

- On the Weyl metrisability problem for projective surfaces and related topics
  Advisor: Prof. Dr. Norbert Hungerbühler
  Ph.D. thesis in Mathematics, Université de Fribourg, Switzerland, (2010)

- D-brane charges in WZW models
  Advisor: Prof. Dr. Matthias Gaberdiel
  Diploma thesis in Physics, ETH Zürich, Switzerland, (2005)