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**Splitting-gluing results for geodesically  
equivalent metrics with (c-)projective  
vector fields**

**07. Juli 2022 – 17.15 Uhr**

**IGT-Seminarraum 7.530, Pfaffenwaldring 57**

Abstract: Projective vector fields of (pseudo-)Riemannian metrics are vector fields whose local flow preserves geodesics up to reparametrisation. Similarly, for Kähler metrics, c-projective vector fields preserve so-called J-planar curves.

The talk presents some recent results on splitting-gluing phenomena of metrics admitting such vector fields. Splitting-gluing constructions for geodesically equivalent metrics (i.e., metrics sharing common unparametrised geodesics or, respectively, J-planar curves) have been obtained by Alexey Bolsinov and Vladimir Matveev (2011). The purpose of the talk is to present situations in which (c-)projective vector fields can be incorporated into this construction.

