# $K$-CONFORMAL MAPS OF A STATIONARY SPACETIME AND RANDERS METRIC

Abstract. We study the conformal maps of a stationary spacetime fixing the flow lines of the timelike Killing field $K$, which we call $K$-conformal maps. We will use the relation between a stationary spacetime $(\mathbb{R} \times S, g)$ and a Randers metric in the base $S$ to study these maps. In particular, $K$-conformal maps project to maps in $S$ that preserves the Randers metric up to the differential of a function. We will deduce some results about the genericity of these maps.