

Nonorientable Regular Maps Over Linear Fractional Groups

M. Mačaj

Comenius University,
Bratislava, Slovakia
`martin.macaj@fmph.uniba.sk`

Abstract

Nonorientable Regular Maps Over Linear Fractional Groups Martin-Macaj Comenius University, Bratislava, Slovakia `martin.macaj@fmph.uniba.sk` It is well known that for any given hyperbolic pair (k, m) there exist infinitely many regular maps of valence k and face length m on an orientable surface, with automorphism group isomorphic to a linear fractional group. A nonorientable analogue of this result was known to be true for all pairs (k, m) as above with at least one even entry. In this paper we establish the existence of such regular maps on nonorientable surfaces for all hyperbolic pairs. The material presented is a result of a joint work with Gareth A. Jones and Jozef Iriš.