1112-30-142 **Emilio Bujalance**, **Javier Cirre*** (jcirre@mat.uned.es) and **Peter Turbek**. *Lifting the hyperelliptic involution of a Klein surface.*

We consider unbranched normal coverings $X \to X'$ between compact Klein surfaces of algebraic genus bigger than one where X' is hyperelliptic. Here unbranched means that the fixed point set of the group of covering transformations is either empty or projects onto the boundary of X'. We find a criterion which determines whether the hyperelliptic involution of X' lifts to an automorphism of X. The study splits naturally into five cases, according to the different topological types that X' may have. Similar results in the setting of classical Riemann surfaces (orientable and unbordered) were given by Turbek in 1997.

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