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Quasigroup covers of division groupoids

Abstract: Let G be a division groupoid that is not a quasigroup. For each regular cardinal $\alpha > |G|$ we construct a quasigroup Q on $G \times \alpha$ that is a quasigroup cover of G (i.e., G is a homomorphic image of Q and G is not an image of any quasigroup that is a proper factor of Q). We also show how to easily obtain quasigroup covers from free quasigroups.

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