1046-03-1348

Steve C Jackson\* (jackson@unt.edu), Department of Mathematice, University of North Texas, Denton, TX 76203-5017, Su Gao (sgao@unt.edu), Department of Mathematics, University of North Texas, Denton, TX 76203-5017, and Brandon Seward, Department f Mathematics, University of North Texas, Denton, TX 76203-5017. A compactness theorem for markers and group colorings. Preliminary report.

We formulate a compactness property for complete sections of Borel equivalence relations. This is a natural notion arising from hyperfiniteness proofs and related questions. The compactness property, in turn, leads to a purely algebraic question about groups. We formulate this as a coloring property of countable groups and investigate it. (Received September 15, 2008)