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Ian Melbourne, Viorel Nițică and **Andrew Török*** (torok@math.uh.edu), University of Houston, Dept. of Mathematics, 651 PGH, Houston, TX 77204-3008. *Transitivity of non-compact extensions of hyperbolic systems.*

Consider a hyperbolic basic set of a smooth diffeomorphism. We are interested in the transitivity of Hölder skew-extensions with fiber a non-compact connected Lie group. In the case of compact fibers, the transitive extensions contain an open and dense set. For the non-compact case, we conjectured that this is still true within the set of extensions that avoid the obvious obstructions to transitivity. Within this class of cocycles, we prove generic transitivity for extensions with fiber the special Euclidean group $SE(n)$, n odd (the case n even was known earlier), more general Euclidean-type groups $G \ltimes \mathbb{R}^n$ with G compact connected, and some nilpotent groups. (Received September 12, 2010)